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KANSAS MEDICINE

JOURNAL OF THE KANSAS MEDICAL SOCIETY

January 1990

Volume 91, Number 1

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The 1990 Legislature Is Now in Session.



KANSAS MEDICINE

VOLUME 91 • NUMBER 1 • JANUARY 1990

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ABOUT OUR LOGO

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

What is so rare as a day in June?" asked James Russell Lowell. Well, one suitable response might be, "A January day in Kansas when the wind isn't blowing!" Fortunately, one such phenomenon was preserved for us on film by Photo 1 Inc. of Topeka. We present their photo of the capitol on that calm day in observance of the 1990 legislative session, which began on January 8. (Dare we suggest that the wind has picked up in Topeka since that date?)

Tempests are nothing new in Kansas, as the state motto, *Ad Astra per Aspera*, suggests. And this legislative session is likely to stir up a few more, with issues such as property reappraisal on the slate. But even before it was occupied, our state house had had its share of *aspera*. Consider, for example, the construction of the east wing, seen at the right in our photograph. On March 26, 1866, a resolution was passed for construction to commence immediately. This provoked a squabble over who would furnish materials, and finally brown sandstone from Shawnee County was chosen. The cornerstone was laid on October 17, 1866, and the sandstone foundation was built. But a severe winter took its toll on the soft sandstone, and by the following year it was crumbling. It was said that it cost \$40,000 to build the foundation and another \$40,000 to remove it. The new foundation, of Geary County limestone, endured.

The east wing was completed in 1873, but a stone fence had to be built to keep roving cows and pigs out of Capitol Square. Though this fence did the job, Topekans condemned it as "unsightly," and it was later replaced with a "pig-tight" wooden fence.

Even interior decor at the capitol was controversial. In 1898 the Populists had murals painted depicting Greek women whose immodest attire showed too much skin for Republican tastes. So in 1902, having wrested political power from the Populists, the G.O.P. contingent hired their own muralists to replace the brazen creatures with decent womenfolk. These fully clothed ladies may still be seen above the rotunda. And nearly a century later, the definition of pornography is still being debated!

The historical source for our story was The Kansas Capitol, published by the Secretary of State's office. Next month, the work of artist Jim Hamil will return to the cover of KANSAS MEDICINE.

Point of View

Some time in our dark past, when religious sensitivities did not inhibit references to gods and such in schools, we learned that the month of January was named after Janus, the Roman god of doors, whose two faces symbolized the view behind us and the view ahead.



We have reached the point when we find ourselves increasingly beholden to old Jan. This stems from the fact that our view ahead is not only shorter, but more certain; while the increasingly long view back, in the form of personal history, invites observations, generally of more interest to the observer than anyone else. Such observers have the benefit of cornering younger audiences who, not having been there, can't question the accuracy of the tales of the past. (Devotees of oral histories: be warned that recalled events are likely to have happened in quite a different manner — or not to have happened at all.)

So this looking both ways seems an inevitable accompaniment to aging and is probably the major cause of conflict between the ages — the elders clinging to what they have known out of reluctance to give it up; the younger seeking to establish their own. Such thoughts stemmed from the information that a grandson was considering a career in medicine. Admittedly, the matter came up not because of any direct request on his part for advice but, since it was there, it seemed to call for some sage observations. We confess we found the self-imposed assignment more difficult than we had expected because, we presume, of a true uncertainty of what the future holds for medical practice. Oh, there is no lack of opinions — from the ominous assurances that the end of the medical world is at hand to the assurance of even greater victories just ahead.

It could hardly be otherwise when we consider the events of the past century in medicine and in the socioeconomic world with which it has become melded. It brought to mind another question. Would the medical parents of a prospective medical student offer different comments on those events and the prospects for future practice than would the grandparents? Would the relatively

short period of a generation (short in the long age of medical service) make a difference in the attitudes of the two? One would be inclined to say that if any period of medical history could accomplish such a change of feeling, the years just past and upon us now would do it. And again, one wonders whether that interpretation is justified or is just the arrogance of belief that *we* have experienced events of greater magnitude than have our predecessors.

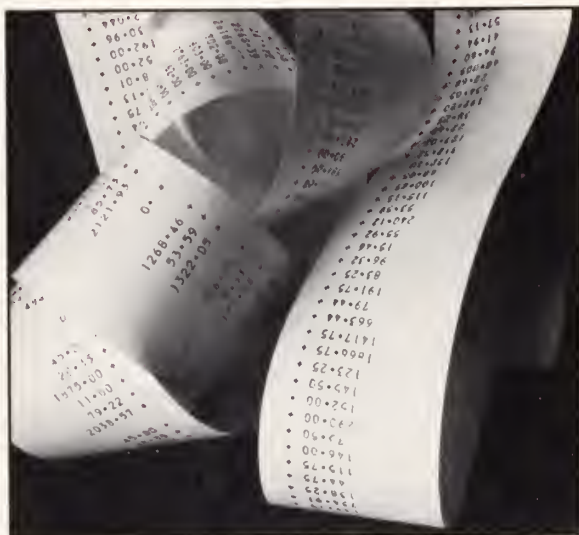
It has been reported not infrequently that medical parents are increasingly advising their children not to go into medicine — or at least, not encouraging them in that direction. Certainly, there has never been a time when the promise of medicine for dramatic accomplishments was greater (there's that old arrogance of presence again), but this and numerous influences have changed the form of medical practice to one which alienates many and discourages even the optimistic. The physician is pleased, on the one hand, to be able to offer such actual and promised benefits but, on the other, resentful of the changes in practice conditions which are part of it.

So the shifting tides have washed away some of our cherished self-image. The medical persona is increasingly suspect in the eyes of the public criers. The physicians are angered at the situation because, from the beginning, they have been motivated by a desire to provide the basic form of medical service and are reluctant to permit any of it to be sacrificed in the name of socioeconomic necessity. So the profession is subjected to a dichotomy of purpose: to promote its values to the coming generations, or discourage them because of their own sense of loss.

The only solution we have personally been able to reach (and we have advanced it before) is to recall that those coming on have grown through changes as great as we have been through during our practice days. For all the fidelity to certain academic basics, they will be taught differently, and they will certainly practice in a different world — one for which they are better prepared than were we or our elders in our own times. And they will do as well at it — or, in all likelihood, better than we have. But they'll have to work at it.

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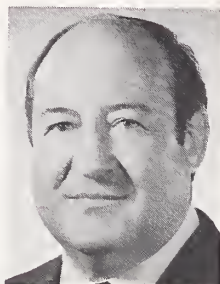


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They Know Enough Who Know How to Learn

(HENRY ADAMS)

In early January, the University of Kansas School of Medicine selected its entering class for September. Parameters for selection include Kansas residency, undergraduate and graduate grade-point average, pre-med advisor recommendation, activities, interests and special qualities revealed by the application for admission, and the opinion of an individual interview team. These interview teams consist of one basic science and one clinical faculty member, one Kansas Medical Society member and one governor's appointee. These inputs are then weighed by all of the interview teams meeting as a committee of the whole.



The applicant pool, declining steadily from 10 until 2 years ago, is slightly larger this year than last. Last year's class was about 36% female and 64% male; this class bids to remain about the same. Paper qualifications, as measured by MCAT and GPA, may be in the second year of improvement from the 1988 low.

To those who serve the Kansas Medical Society on the medical school admission team, our heartfelt thanks! It is a full week away from home and practice, is no vacation and is serious business. If any Kansas Medical Society member has an interest in serving on this committee for January 1991, please send your name in to the KMS office.

To the incoming class of 1990, best wishes for a fulfilling career.

In the early years of this century, the Flexner report revolutionized medical teaching. The change from precept to didactic teaching vastly improved the core of knowledge possessed by the average medical graduate. There clearly is no better way to teach so much basic science so quickly. Intense desire and "the joy of learning" make up for the dryness inherent in much didactic teaching, and the more resourceful instructors leaven their presentations with clever visual aids, a sharp wit and a good stage presence. Still, there comes a time when one must make the transition from the dry didactic to the real world — to get one's

feet wet, as it were. Sadly, this time used to be postponed until many students had forgotten the lessons taught first time around. Many factors combined to delay the assumption of responsibility for patient care.

"One wonders if a generation of ever-harsher legal judgments might have been somewhat ameliorated had the rotating internship survived."

Students used to be taught with special care and urgency on each undergraduate rotation because it was possible to go into practice immediately upon graduation. Although this option was rarely taken, students tried to visualize making the decisions needed in each case. One put off final selection of a specialty until the first postgraduate year, almost always a rotating internship. Thus, even those who professed that they were destined to become neurosurgeons from their first freshman day realized they could be expected to care for patients in every discipline covered during medical school while serving the rotating internship. This considerably broadened their interests.

Then, just at the right time (if you accept the gospel according to Warren), came that rotating internship and that chance to review. All incentives were right for rapid learning: the patient's life depended on you, especially at night and on weekends; one had excellent back-up from residents and/or attending physicians; and the quid-pro-quo was, "I will teach you everything I can, fast and well as I can, and you in turn will care

(Continued on page 5.)

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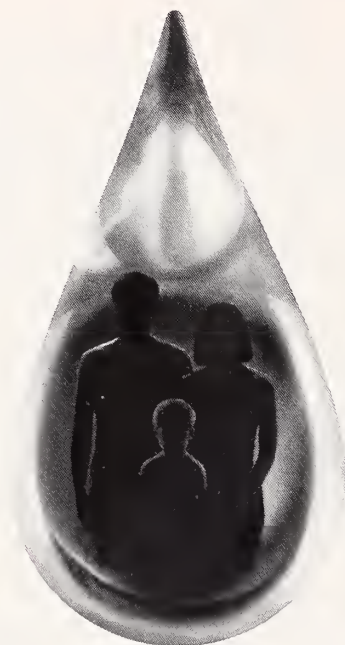


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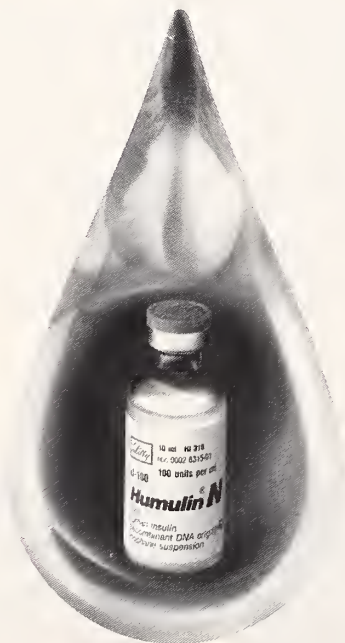
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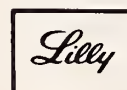


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PRESIDENT'S MESSAGE
(Continued from page 4.)

for my patients when I am off for the night.”

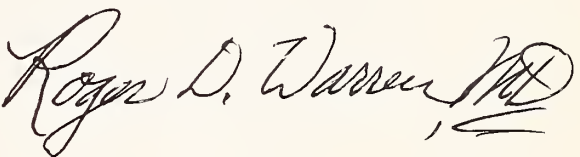
After a year of such review (and also assimilation of new knowledge), one had truly internalized and reinforced most of the material taught in medical school. Regardless of our own eventual specialty, most of us then had an understanding of our colleagues’ problems in their field of interest. Having already “walked a mile in another’s moccasins” served to temper one’s criticism of a colleague’s medical misadventures. One wonders if a generation of ever-harsher legal judgments might have been somewhat ameliorated had the rotating internship survived.

In any event, since the nadir has come a recovery of interest in a broadly based first post-graduate year. Many students rushed through medical school in 36 months and took a broadly based clerkship between medical school and res-

idency, while others used their preceptorships — basically to review. Many labeled this their best learning experience. The sub-internship is another chance to assume patient care responsibility. Almost a fourth of the current graduating class will take a transitional-year residency (nearly a clone of the old rotating internship).

There is much good to be said for a transitional year becoming more widely used — to build a broader understanding of the basis of each specialty, but also to promote greater harmony between colleagues and most important of all, to review and assimilate the disciplines taught in medical school.

Sometimes progress is made — as in the recent worldwide endorsement of democratic ideals — by a return to old ways and values.



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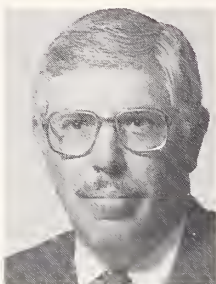
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Doctor Sues Lawyer . . . and Wins

WAYNE T. STRATTON, J.D.,* *Topeka*

Although historically it has been difficult for physicians to sustain a cause of action for malicious prosecution, a Topeka physician recently obtained a judgment against an attorney. In 1986, the Kansas Neurological Institute and eight other physicians were sued for malpractice after the death of a boy at the Institute. Many of the defendants settled for a nominal amount; however, one of the physicians refused to settle, and the plaintiff ultimately dismissed the action with prejudice. This physician, a pediatrician, had treated the boy on an on-call basis on several different occasions.



Ultimately, the plaintiff's counsel was unable to find an expert witness relative to the actions of the pediatrician and dismissed her from the suit, but only after the physician had lost a favorable commitment from a lender for a home mortgage. When the action was dismissed, the Court specifically found that after completion of the discovery, it appeared to plaintiff's counsel that the defendant's fault was insufficient for prosecution.

Several months after the dismissal, the pediatrician sued the plaintiff's counsel. In October 1989, the physician recovered a judgment against the plaintiff's attorney in the amount of \$85,055.

As was mentioned in the January 1989 "Medicina et Lex" article, the successful pursuit of a malicious prosecution case is difficult and has met with limited success. Several recent changes in the Kansas statutes have served to impose higher obligations upon attorneys for filing and maintaining lawsuits.

In order for a physician to recover for malicious prosecution, the physician must prove: (1) that

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

Q: *If I am sued, can I counter-sue?*

the malpractice action was terminated in the physician's favor; (2) that the lawsuit was filed or continued without probable cause; (3) that the lawsuit was filed with malicious motives; and (4) that the plaintiff physician was actually damaged.

As mentioned, Kansas law does not favor claims for malicious prosecution; however, the recent decision in *Heeb v. Wachtons* illustrates that attorneys may incur liability because of their actions in representing plaintiffs in medical malpractice cases. The allegations in the petition and the judgment indicate that the physician was able to show actual damages as a result of the suit, and that the suit was terminated in her favor. Apparently, the attorney was not able to demonstrate probable cause in either filing or continuing the lawsuit.

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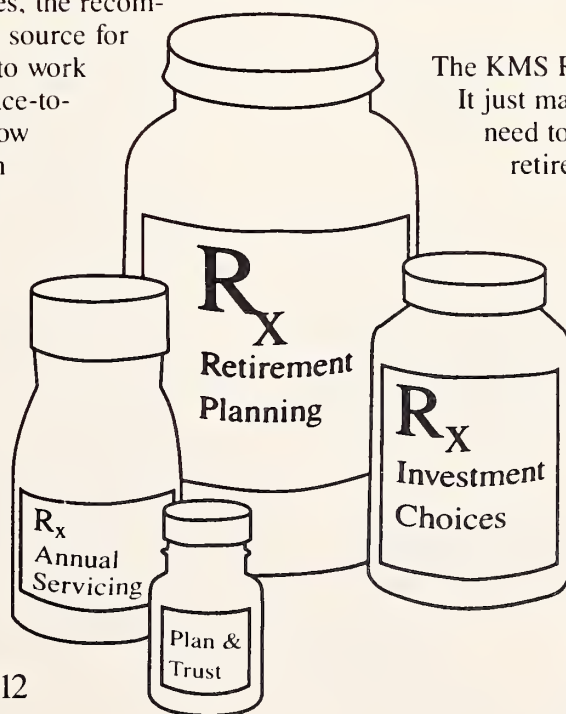
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President's Message

January marks not only the beginning of a new calendar year, but the beginning of a new decade. We are leaving the 80s behind and entering the 90s. This is also the midpoint of the Auxiliary year and thus an appropriate time to evaluate and reflect on our projects and goals.



I believe we are energized by our achievements. Most of our auxiliaries are involved with ongoing health projects in their communities — giving volunteer and financial support to existing activities, as well as spearheading their own new programs for comprehensive school health education, AIDS education, drug awareness, anti-smoking campaigns, youth yellow pages and numerous other projects. Those are the auxiliaries whose membership is greatest in relation to potential members available. Having visited 20 of

“From your daily practice, you are aware of your patients’ needs. . . . Are there ways that auxiliary volunteers can help?”

the 25 county auxiliaries this fall, I am convinced that people will join causes they feel are worthwhile (even when they can’t personally be active) and from that a hidden energy emerges to cause the group to do more.

In the past, I have suggested that each local medical society turn to its auxiliary for help with local health needs. From your daily practice, you are aware of your patients’ needs that aren’t being met. Are there ways that auxiliary volunteers can help? There would be rewards and benefits not only for the recipient, but for the auxiliary and physician as well.

During the fall Confluence I, we viewed an exercise video for elderly people commissioned by the Illinois Medical Society Auxiliary. The video is especially appropriate for nursing home patients and others who have limited ability to walk. We have arranged to purchase the same video with the KMSA logo on it. Auxiliaries are presenting them as gifts to local nursing homes. Shawnee County has ordered 31 for this purpose. Saline County purchased one especially to give to the library. The video case displays our logo and the message: “Brought to you through the courtesy of the Kansas Medical Society Auxiliary.” What wonderful public relations! If you would like any for your patients, I have them available at \$20 each.

As you are keenly aware, there are many changes in medicine, in the technology as well as governmental regulations. We want to work with you so our efforts reflect that we are catalysts for and not victims of the changes.

Joan Tempers

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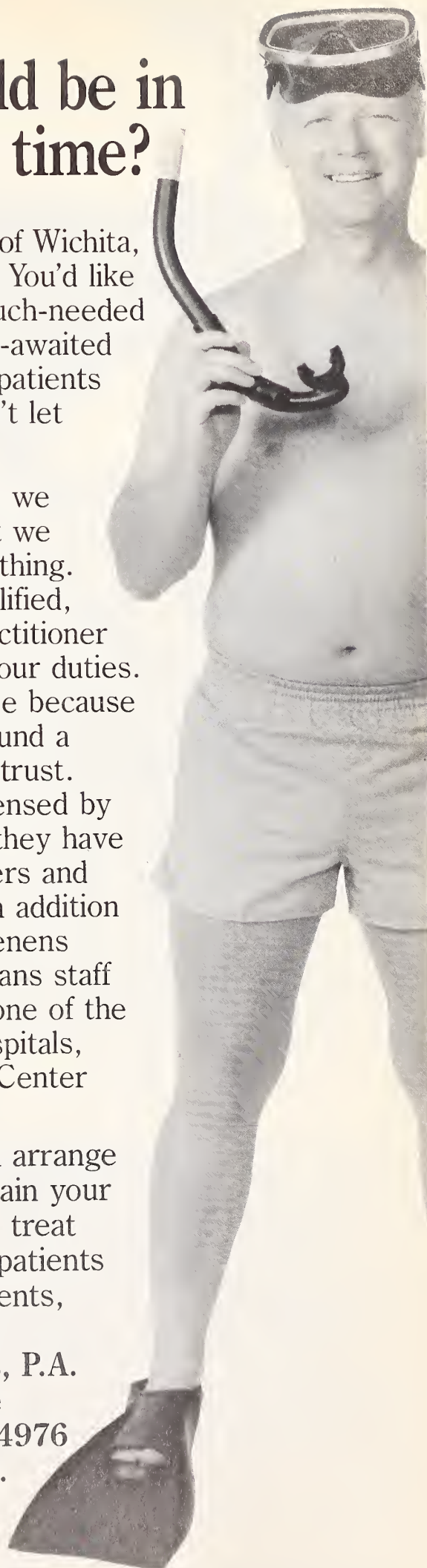
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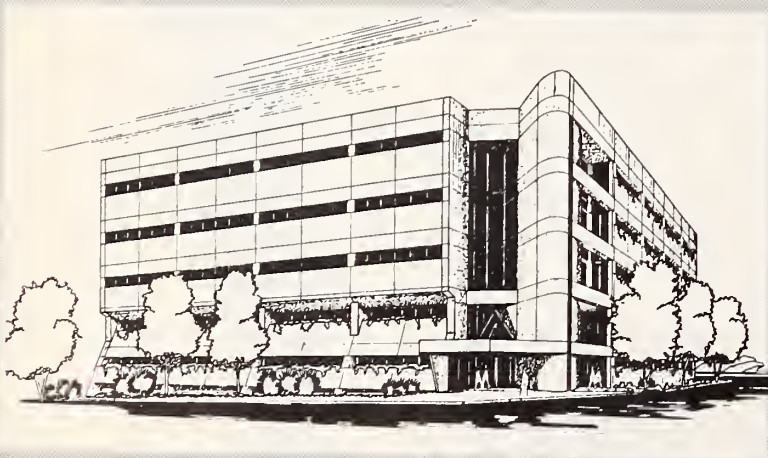
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A Method for Removing the Acrochordon (Skin Tag)

EDWIN D. RATHBUN, M.D.,* *Liberal*

Since Hippocrates described the "akrochordon," no less than 36 synonyms for this type of lesion have appeared in the literature, but none seems to have improved upon the Greek physician's reference to it. A literature search revealed at least 22 syndromes or conditions that include the acrochordon, also commonly known as a skin tag or pedunculated fibroma. But reference to the method of removal described in this paper has not previously been published in the medical literature or in textbooks of dermatologic surgery, although informal survey indicates the method may be frequently utilized.

Method

The skin is lightly cleansed with soap and water. A straight mosquito hemostat or a straight Crile or Kelly or a needle holder is used to crush the base of the tag so that a flat skin surface below is predicted, and ensuring that any dysplastic growth not obviously normal in appearance is above the surface about to be crushed. The crushing device is left on for 10 to 15 minutes. A scalpel is used to remove the tissue above the clamp, and the tissue is sent to pathology, if desired. On larger lesions a butterfly dressing may be used to take the tension off the skin edges. The patient is instructed to wash the area very gently and only if obviously unclean. The patient is advised to return if there is redness, swelling or other sign of infection, or if dehiscence of the wound occurs.

Comment

There are numerous congenital abnormalities that include preauricular skin tags.¹⁻⁸ Supernumerary

digits sometimes are indistinguishable from skin tags, save by their location. If they do not contain cartilage or bone structures, these lesions may be treated as skin tags.



Figure 1. The acrochordon is grasped and crushed.

Other simple methods referred to in the literature include: cutting off lesions with an iris scissor or a serrated-blade scissor;^{9,10} electrocautery,¹¹ sometimes with anesthesia or prior application of liquid nitrogen;^{12,13} and ligation with suture or copper wire.¹⁴ Discretion is necessary because basal-cell epithelioma may be present in pedunculated lesions.¹⁵

Recent literature suggests statistical association of skin tags with diabetes mellitus,¹⁶ with carci-



Figure 2. The lesion is clamped at skin level, and a scalpel is used to remove the tissue above the clamp.

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Information for Authors

Manuscripts must be typewritten, double-spaced, leaving wide margins. The original plus one copy should be submitted. Manuscripts are received with the explicit understanding that they are not simultaneously under consideration by any other publication. Publication elsewhere may be subsequently authorized at the discretion of the editor.

Brief, concise **articles** are preferred; an ideal manuscript will not exceed five double-spaced pages. All material will be edited by the editorial staff to assure clarity, good grammar and appropriate language, and to conform to KANSAS MEDICINE style and format. When feasible, material may be condensed.

The author will be asked to review the **galley proof** prior to publication. Although editing and proofreading will be done with care, the author is responsible for accuracy of material published. The galley proof is for correction of **ERRORS**; rewriting of material *must* be done prior to submission. Authors are urged to check manuscripts and galley proof carefully for errors that could result in inaccurate information.

Drugs should be referred to by generic names; trade names may follow in parentheses if useful. All **units of measure** must be given in the metric system.

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A **reprint** order form with a table showing estimated cost will be sent with the galley proof. Reprints must be ordered by the author through KANSAS MEDICINE, and will be billed to the author following shipment.



Figure 3. The clamp is left in place for 10 to 15 minutes.

noma and polyps of the colon¹⁷ and with acromegaly,¹⁸ suggesting that screening for associated disorders may be advised whenever extirpation of these lesions is attempted. Hereditary autosomal dominance is demonstrated in one syndrome^{19, 20} with skin tags. There is also association with both pregnancy and menopause.^{21, 22}



Figure 4. Crushed skin closure and "dressing."

Basic research on the subject suggests that EGF (epidermal growth factor) and/or α tGF (alpha tissue growth factor) may be indicated as factors in development of this type of lesion and in the syndrome of Leser-Trélat. One report describes a patient with melanoma who experienced regression of skin tags and seborrheic keratoses, along with a decrease in serum levels of these substances in association with control of the neoplasm and its metastases.²³

REFERENCES

A list of references is available from the author upon request.



KANSAS MEDICAL SOCIETY Newsletter

1300 Topeka Ave. • Topeka, Kansas 66612 • (913) 235-2383

JANUARY 1990

LEGISLATURE COMMENCES 1990 SESSION

The 1990 legislative session officially began at 2:00 p.m. on Monday, January 8. The Governor's legislative message was delivered the same day and was accompanied by budget recommendations described by Governor Hayden as "austere, but adequate." Not surprisingly, at the time of the Governor's speech the Statehouse was full of protestors who were upset about either their property taxes or the recently approved cuts in public assistance programs.

Predictably, the Governor's message and initial legislative activities have focused almost entirely on questions surrounding the outcome of reappraisal of real estate and classification of property. Those elected officials seeking reelection in 1990 are desperately struggling to deliver the voters a package of relief programs designed to soften the blow of reappraisal. Of course, the initial scramble consists of legislative committees seeking options for financing the property tax relief programs that have been envisioned. In this context, the Governor, in his legislative message, vowed that he would veto any legislation that would increase the rate of either the state income tax or the state sales tax. The Governor did not, however, promise to veto any legislation that might repeal any existing tax exemptions.

One of the very first hearings conducted during the 1990 session was held by the House Taxation Committee. The hearing consisted primarily of an explanation by the Secretary of Revenue that was entitled "Sales Tax Base--Loopholes and Exemptions." One of the exemptions in the current sales tax law is that of services. And one of those services is, of course, medical care provided by physicians. It has been suggested by a number of legislators that now is the time to repeal the exemption on services and thereby generate substantial additional revenue for the State General Fund. None of them, however, has addressed the specific question as to whether medical care should continue to be exempt from sales tax. Perhaps it would not be too soon for KMS members to communicate with their legislators and remind them that it is simply not good public policy to impose a tax on citizens for becoming ill or being injured.

During the course of the 1990 legislative session, there will be a number of issues affecting the medical profession. As we did in 1989, the KMS staff will publish occasional Legislative Bulletins that will provide up-to-date information on pertinent issues. Please watch for these newsletters in your mail.

NEW PRESIDENT AND CEO
AT BLUE CROSS/SHIELD

Thomas L. Miller has been named president and chief executive officer of Blue Cross and Blue Shield of Kansas, effective on

March 1. He will succeed G. Wayne Johnston, who is retiring after ten years as president.

MEDICAL ASSISTANTS' SEMINAR

The Kansas Medical Assistants Society will hold its spring seminar on March 17 from 10:00 a.m. to 5:00 p.m. at the Olathe Medical Center Doctors' Building, Suite 203, Olathe, KS. Two attorneys will speak on legal responsibilities of medical assistants, medical records and prescriptions. Credit for 6 CEUs has been applied for. To register for this seminar, or to obtain more information, call Liane Hower at 913-782-3377.

AIDS TRAINING SESSIONS

Joint basic and update training sessions in HIV education, family planning, counseling and testing are tentatively planned in early 1990 for Kansas City, El Dorado, Hays and Dodge City. For more information, call Av Mercer at 913-296-6173.

MMR IMMUNIZATIONS SHOULD BE REPEATED, SAYS AAFP

The American Academy of Family Physicians (AAFP) has recommended routine second measles, mumps and rubella (MMR) immunizations for children four to six years of age, or just about to enter school. The AAFP also said that children in areas where there is a high risk of contracting measles should receive their first MMR at 12 months, instead of 15 months of age. A high-risk area is defined as a county or portion of a county with more than five measles cases among preschool-aged children during each of the last five years, where there has been a recent outbreak among unvaccinated preschool-aged children, or where there is a large urban population.

The AAFP revised its schedule for MMR vaccinations because of the increasing number of infants, children and adolescents who have contracted measles. Some of these cases occurred in children who had been immunized but had failed to develop protection against measles.

NEW DEPARTMENT AT AMA ASSISTS GRADUATES OF FOREIGN MED SCHOOLS

In 1989 the AMA established the Department of Foreign Medical Graduates, whose constituency is foreign-born and foreign-educated medical graduates now practicing in the U.S. At year-end 1988, there were 128,609 FMGs in the country, 760 of whom practiced in Kansas. Of the 128,609 total, 109,251 were foreign-born and 19,358 were American FMGs. There were, however, only 41,803 AMA members in this group.

Concerns of particular importance to FMGs are licensure and reciprocity; issues dealing with alleged discrimination in FMG residency applications, employment decisions and hospital staff privilege determinations; visa problems; and individual problems with AMA policies or programs.

To assist FMGs with these challenges, the Department of Foreign Medical Graduates has set for itself the following goals: developing and implementing communication and liaison mechanisms; addressing the identified concerns of foreign medical

graduates (FMGs); communicating AMA programs and policies to FMGs; and assisting state, county and specialty organizations and national groups representing FMGs in serving the needs of this group of physicians.

The Department of Foreign Medical Graduates welcomes comments and inquiries. Contact the Director, John E. Kasper, at 312-645-5624.

FREE PUBLICATIONS FOR ELDERLY PATIENTS

Many older patients would appreciate a copy of a book available from the National Institute on Aging. Resource Directory for Older People is a comprehensive listing of organizations that can offer assistance to the elderly in the areas of nutrition, volunteer work, safety and health, hospice information, consumer protection and many others. Entries for each organization include its name, address and telephone number; stated mission; services offered; and publications that patients may wish to order.

The 224-page resource directory is free, and bulk orders for this and other free publications from the NIA are accepted when inventory permits. To order, write the NIA Information Center, P.O. Box 8057, Gaithersburg, MD 20898-8057.

MORE BAD NEWS FOR SMOKERS

As if there were not already enough reasons not to smoke, one more has recently been elucidated: cigarette smoking leads to a redistribution of body fat that is associated with increased risk of heart disease, diabetes and early mortality. Although cigarette smokers tend to weigh less than non-smokers, and cessation of smoking often leads to significant weight gain, smokers in a study reported in 1989 were found to have larger waist-hip ratios (WHRs) than non-smokers. This is the fat distribution pattern associated with these risk factors.

In the study, smokers who quit gained 5 pounds, on average, but this weight gain did not adversely affect the WHR. Ex-smokers who resumed smoking lost an average of 2.2 pounds, but their WHR increased despite the weight loss. This paradoxical change in WHR suggests that using smoking as a method of weight control is unwise, the researchers concluded.

AZT THERAPY IMPROVES AIDS SURVIVAL

Long-term therapy with zidovudine (AZT) for patients with AIDS and AIDS-related complex is showing increased survival benefits, according to a recent report from Florida. More than one-half of the original AZT-treated patients with AIDS in the study group survived 21 months following the diagnosis of pneumonia, nearly twice the reported survival of comparable patients not treated with AZT. Adverse reactions to AZT decreased over time, and the drug also decreased the rate of development of opportunistic infections in patients with advanced AIDS-related complex progressing to AIDS.

CONFERENCES

The tenth annual AMA Health Reporting Conference will be held in Denver April 5 through 8. This conference will be of

interest to physician broadcasters and medical communicators. In addition to workshops on improving broadcasting and communication techniques, there will be group sessions on the ethics and issues of medical reporting. For information and registration materials, call the AMA at 312-645-5102.

Surgery for Epilepsy, an NIH consensus development conference, will be held March 19 through 21 in Bethesda, Maryland. Topics to be discussed will include selection of patients, evaluation to localize epileptic foci, procedures appropriate for specific epilepsies and assessment of outcome. To register, call the conference registrar at 301-468-MEET.

PROFESSIONAL PATIENT

The Kansas Hospital Association reports that a possible professional patient has visited Norton County Hospital's emergency room, complaining of abdominal pain and pancreatitis. He was recently treated for alcoholism.

The patient calls himself Allen Layman and says he is from Kingman. He is 5'9", 168 pounds, and 38 years old (birth date May 21, 1951). He has brown hair and eyes and has a scruffy appearance. He routinely requests injectable pain medications. For more information, call Georgia Briery at Norton County Hospital, 913-877-3351.

SUBLIMINAL AUDIOTAPES ARE A "FRAUD"

Behavior-modification audiotapes purported to have a subliminal effect on listeners' behavior are "health frauds," according to an audiologist and a psychologist who spoke at a recent meeting of the American Speech-Language-Hearing Association. Various tapes are supposed to encourage weight loss, improve self-esteem, aid smoking cessation, and facilitate recovery from drug addiction and depression, among other things.

Typically, the tapes contain a brief message which is repeated at a speed in excess of the 500-words-per-minute maximum the human auditory system can process. (The rate of ordinary speech is 150-200 words per minute.) Presumably, the unconscious or subconscious mind can absorb the message, even though the conscious mind cannot decipher it. This assumption is erroneous. Any benefits that may accrue while listening to such tapes are the result of the listener's belief that the message is beneficial, not the subliminal message itself.

Consumers should be made aware that these tapes are based on false assumptions about the auditory system and the unconscious or subconscious. Moreover, health-related tapes can cause harm by depriving consumers of medical care by qualified professionals.

VALENTINES FOR YOUR PATIENTS

With Valentine's Day on the 14th, it seems only fitting that February should be designated American Heart Month. Why not observe it by offering your patients a Valentine they'll enjoy for years to come: some guidelines for good cardiovascular health. A tasty, low-cholesterol recipe or a coupon for a free visit to a local fitness center would be a fitting way to get them off to a good start.

SPECIAL SUPPLEMENT: MEDICARE

NEW STAFF MEMBER AT KMS

KMS has added a specialist to assist with Medicare, Medicaid and Blue Cross/Blue Shield reimbursement issues. Carolyn Counts, Director of Health Care Finance, is the KMS liaison with the fiscal intermediaries, SRS and HCFA. Carolyn will provide brief overviews of coverage and reimbursement changes, workshops and consultations, both in physicians' offices and by phone. Carolyn can be contacted by calling the KMS office. She will also receive physicians' comments concerning changes in Medicare medical policy, and convey those comments to both Medicare and AMA. An AMA survey summary follows the quick review of current Medicare changes that affect your office.

MEDICARE REIMBURSE- MENT ISSUES FOR QUICK REVIEW

Please Note: Effective April 1, 1990, you must accept assignment for services rendered to Medicare/Medicaid patients in order to be reimbursed by MEDICARE. This includes claims for Qualified Medicare Beneficiaries (QMBs).

PAYMENT TO A REFERRING LABORATORY (Shell Laboratories Legislation)

Beginning January 1, 1990, payment for clinical diagnostic lab tests will be made only to the person or entity who performed (or supervised the performance of) the tests. These clinical diagnostic procedures are defined as those that do not require a "body" to perform, but rather involve specimens sent out to a lab (pap smears, profiles, etc.).

"SELF-REFERRAL" LEGISLATION CHANGES IN REFERRALS/BILLING

The provisions of the "self-referral" legislation prohibit referrals to a clinical lab if the ordering physician or his/her immediate family members have a financial interest (through debt, equity, or other means). Only clinical labs are included in the referral prohibition, and there are exceptions for group practices, pre-paid plans, etc. This portion of the legislation is effective January 1, 1992. REPORTING OF INTEREST requirements become effective October 1, 1990.

Each claim for Medicare Part B for which there has been a referral must include the name and provider number of the referring physician plus an indication of whether the referring physician is an interested investor. This requirement for disclosure applies to all services at this time, NOT JUST CLINICAL LAB. Monetary penalties and sanctions are applicable for nonassigned claims and denial of payment for assigned claims that do not provide these data.

Resource-Based Relative Value Scale (RBRVS) will be implemented over a five-year period beginning in January 1992. Data now in the pipeline will assist in determining geographically the volume and intensity of service data. However, data for 1990 and 1991 will also be used. Carriers will monitor and profile physicians' billing patterns. Physicians may want to instruct their billing staff to adjust claims that contain payment errors as soon as possible and to seek assistance with claims payment problems in order to represent their practice accurately in the profiles.

ARE YOU MISSING PAYMENTS?

Listed below are the counties designated Class II Health Manpower Shortage Areas (HMSAs) in Kansas. Physicians who perform services within the HMSA areas are entitled to an extra 5% incentive payment, paid on both assigned and nonassigned claims. You will not receive this automatically; the incentive must be claimed by listing a special Place-of-Service code in field 24-B of the HCFA-1500 claim form. The Place-of-Service codes are listed in your February 1989 Medicare Bulletin #SM-5-89. The counties designated as HMSAs are: all of Coffey and Woodson and portions of Dickinson, Marion, Marshall, Morris and Nemaha counties, as outlined in the maps in the above-referenced Medicare Bulletin. If you have an office in one of these counties or you perform services in one of these counties, check with your office manager to ensure the incentives for those services were claimed.

The controversial issue regarding "medically unnecessary" denials is both explained and made easier to work with in Medicare Carrier Review, now available from KMS. This reference manual provides an overview of the legislation, an explanation of the medical review process and the screening criteria, methods for avoiding patient payment problems by providing advance notice and tips for managing the system. Copies of the manual are available for \$5.00, plus tax, and may be ordered from KMS by calling 1-800-332-0156 or 913-235-2383.

NEW MEDICARE CARRIER MEDICAL COVERAGE POLICY PROVISIONS

As mentioned last month, HCFA and the AMA signed an agreement which assured that state medical societies would have an opportunity to review and comment on proposed changes in Medicare medical coverage policy. Medicare Manual instructions called on the carrier's medical director to:

1. Invite comment from the state medical society and appropriate specialty societies on the proposed policy changes.
2. Ensure that changes are made to carrier medical policy only after comments of the medical societies have been considered.
3. Discuss comments received by corresponding directly with the medical societies to outline potential modifications of medical policy, providing the rationale for the final policy decisions.
4. Assure that final policies are not effective until thirty days after their dissemination by notice in carrier newsletters and bulletins.

Carriers were also instructed to solicit recommendations from medical societies for specific numeric parameters that may be used with medical review screens associated with implementing the policy at the carrier level. Medical societies have been given a minimum of 30 days to comment on the proposed medical policy changes.

As part of an overall program to help medical societies respond to these comment opportunities, AMA is building a database that will catalogue medical coverage policy proposals AND MEDICAL SOCIETY RESPONSES TO THOSE PROPOSALS. Once in place, this data base will become a useful resource to medical society staff and appropriate review committees as they prepare to review and respond to proposed medical coverage policy changes. Medical society staff will be able to obtain information quickly from the AMA about whether policy on a particular or related procedure or service has been developed by other carriers and evaluated by relevant state medical and specialty societies. Copies of the responses will be forwarded promptly to the requesting medical society by the AMA.

Your comments and recommendations on Medicare policy drafts will enable us to both present the viewpoint of physicians directly to Medicare officials and to ensure opportunities for future dialogue. Both AMA and HCFA are interested in the numbers and types of opportunities offered by the Medicare carrier and the volume and content of the responses. Please notify your local medical society or Carolyn Counts at KMS if you would like to respond.

PLEASE NOTE NEW MEDICAID TELEPHONE NUMBERS

Due to a new telephone system, the EDS toll-free numbers changed on January 15, 1990. The new telephone numbers are:

Communications Unit	1-800-658-4677
Recipient Assistance Unit	1-800-658-4690
Telephone Drug Prior Authorization Requests and Alcohol/Drug Inpatient Treatment Precertification Requests	1-800-658-4695

All local telephone numbers and all SRS toll-free telephone numbers remain the same.

LIAISON COMMITTEE MEETING

The first Liaison Committee meeting with Medicare was held January 9, 1990. In that meeting, physicians discussed their concerns regarding the failure of the Medicare carrier to notify physicians of the following:

- * when a physician both sees a patient in the Emergency Room and admits the patient to the hospital on the same day, the services are to be billed to Medicare separately. This is different from the instructions for Blue Shield, which direct "bundling" of services, or billing them together. Correctly billing the ER and admission separately will result in resolving the downgrading-of-charges problem physicians have experienced, and increased payment for the services rendered.
- * there is much confusion regarding the requests for documentation physicians are receiving as a result of billings for comprehensive hospital visits. Medicare is performing HCFA-mandated screening on the volume of

comprehensive visits for the same patient billed by the same physician within mandated timeframes. Documentation that supports the medical necessity of the level of service rendered is required if the volume exceeds the HCFA limit.

Medicare agreed to publish billing instructions for same-day emergency room and admission services, as well as general guidelines for requested documentation.

URGENT:
RECENT ERRONEOUS
DENIALS

A HCFA computer problem is responsible for erroneous Medicare denial letters for covered services. Physician denials state: "No Medicare Part B when received." Patients' denial letters read: "Medicare won't pay for this (service) because you did not have Part B (coverage) when you received it." The problem involves eligibility/data files for eligible beneficiaries that were transferred to the wrong region when the centralized files were split to improve efficiency. If you have experienced this problem, please hold your claims denied for this reason at least four weeks before resubmitting.

KMS has a liaison committee with the Medicare FI that meets quarterly. If you have issues that you feel affect a broad segment of physicians, please contact Carolyn Counts at KMS, 800-332-0156 or 913-235-2383, to discuss possible inclusion on the next agenda.

An Unusual Case of Pelvic Pain

JOHN G. BRADLEY, M.D.,* *Wichita*

Pelvic pain can be a perplexing clinical problem. This is a report of an unusual case associated with thrombophlebitis.

A 25-year-old gravida II, para II, female came to the office complaining of left pelvic and lower abdominal pain of seven days' duration. Pain commenced on the second day of menses in the left flank and costovertebral area and then migrated to the left lower abdomen and pelvis. The patient denied other symptoms, recent or chronic illnesses, surgery, recent obstetric delivery or pelvic infection. Her menses had been otherwise normal. The patient was taking no medication except oral contraceptives.

Physical exam revealed an oral temperature of 100.1 degrees Fahrenheit and mild left-lower-quadrant abdominal tenderness without peritoneal signs. Pelvic exam showed moderate cervical motion tenderness and definite left adnexal tenderness, but no masses. Cervical cultures for gonorrhea and chlamydia were obtained, and the presumptive diagnosis of pelvic inflammatory disease was made.

Therapy was begun with doxycycline 100 mg by mouth twice a day, and ceftriaxone 250 mg was given intramuscularly. Over the next three days, symptoms and physical examination did not change. The patient was hospitalized for pelvic inflammatory disease unresponsive to outpatient management. Oral doxycycline was continued, and cefoxitin 1 gram every six hours was given by vein. At that time, the patient's white count was normal, her urinalysis was negative, and erythrocyte sedimentation rate was 56. Serum pregnancy test was negative, as was pelvic sonography. The patient remained afebrile.

On day two of hospitalization, the patient's oral temperature rose to 100.4 degrees Fahrenheit, and metronidazole 500 milligrams every six hours by vein was added for broader antibiotic coverage.

By day three, the patient had not improved. Repeat white cell count was normal, and outpatient gonorrhea and chlamydial cultures were returned negative. At this point, laparoscopy was carried out. All pelvic organs appeared normal. There were no masses, varicosities, evidence of infection or thrombosis. Peritoneal fluid cultures were obtained, and antibiotics were discontinued. Because the patient continued to have the same pain, barium enema, intravenous pyelography and plain radiographs of the hip were done, and all were negative. Serum amylase and comprehensive lab profile were normal. The erythrocyte sedimentation rate was now 54.

On day six of her hospitalization, the patient felt slightly better. She remained afebrile with the same abdominal and pelvic pain. But, since her condition had not deteriorated, she was discharged. The possibility of psychogenic origin of her pain was discussed with her. Computerized tomography scanning of the abdomen was negative at the time of discharge. Pelvic computerized tomography scanning was unsuccessful due to retained barium.

Five days after discharge, the patient's symptoms were still unchanged. Repeat computerized tomography scanning of the pelvis showed thrombosis of the left common iliac and femoral veins, nearly to the bifurcation of the vena cava. Venography confirmed this, showing thrombosis extending upward from the knee. She concurrently developed mild edema of the left leg for the first time. Oral contraceptives were discontinued. The patient was readmitted for intravenous heparin therapy. Within 24 hours after initiation of heparin, the pelvic and abdominal pain had improved substantially and within 48 hours had nearly resolved. Her leg edema also improved. After six days on heparin, she was switched to oral Coumadin and discharged. On follow-up in the clinic, the patient continued to improve. Antithrombin-3 level was normal, and antinuclear antibody and rheumatoid agglutinins were negative.

Discussion

Evaluation of pelvic pain can be challenging, as

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TABLE 1
CAUSES OF PELVIC PAIN

I. Gynecologic Causes	II. Non-gynecologic Causes
A. Infection	A. Gastrointestinal
1. Pelvic inflammatory disease	1. Appendicitis
2. Tubo-ovarian abscess	2. Meckel's diverticulum
3. Hydrosalpinx	3. Gastroenteritis
4. Tuberculosis	4. Mesenteric adenitis
B. Rupture	5. Intestinal obstruction
1. Ovarian cysts	6. Functional bowel syndrome
2. Endometrioma	7. Constipation
3. Tumor	8. Inflammatory bowel disease
4. Ectopic pregnancy	9. Dietary intolerance (e.g. lactose)
C. Torsion	B. Urinary
1. Ovarian cyst	1. Cystitis
2. Tubal	2. Pyelonephritis
3. Hydatid of Morgagni	3. Calculi
D. Vascular	4. Anatomic anomalies
1. Varicosities	5. Hydronephrosis
2. Congestion of pelvis	6. Urethral dysfunction
3. Thrombosis	7. Urinary retention
a. Ovarian vein	C. Orthopedic
b. Small pelvic veins	1. Back disorders
E. Tumors	D. Psychogenic
1. Fibroids	
2. Other malignant and non-malignant tumors	
F. Endocrine	
1. Dysmenorrhea	
2. Endometriosis/adenomyosis	
3. Mittelschmerz	
G. Structural	
1. Uterine anomalies	
2. "Trauma to uterine support"	
3. "Myofascial syndrome"	
4. Prolapse	
5. Adhesions	
a. Postoperative	
b. Post-infectious	

causes are varied. Table 1 lists many of the reported causes.¹⁻⁷ This multiplicity illustrates that the approach to these patients must be comprehensive and is not limited to one organ system. This case is a good example.

At presentation the patient appeared to have pelvic inflammatory disease. When she showed no clinical response, therapy was intensified. When this failed and the laboratory workup was not suggestive, except for an elevated erythrocyte sedimentation rate, diagnostic laparoscopy was performed, as this is felt to be a highly valuable diagnostic test in difficult cases of pelvic pain.¹⁻⁴

With negative laparoscopy, non-gynecologic causes were considered, which might include gastrointestinal, urologic or orthopedic etiologies. When all of these evaluations were negative, the possibility of a psychogenic cause for this patient's pain was entertained, since this is known to be associated with undiagnosed pelvic pain.¹⁻⁴ Computerized tomography scanning of the pelvis was done because the same pain persisted, and no diagnosis had been made. Finding of iliac and femoral thrombosis was unanticipated. It is unfortunate that the leg edema did not appear prior to this point.

This patient clearly had iliofemoral venous thrombosis. However, it is unclear if this was the initial process. If it was, one must assume that the iliofemoral disease initially caused pelvic pain and tenderness in the absence of leg symptoms and signs. While this is possible, it seems unlikely. It is conceivable that the initial problem was pelvic infection, and that this caused the pain and subsequent iliofemoral clots. However, a completely negative laparoscopy — six days into therapy with multiple negative cultures and the persistence of symptoms — contradict this.

The patient clearly did not have ovarian-vein thrombosis, as this would have been apparent at laparoscopy.⁶ Another possibility is thrombophlebitis of small pelvic veins which spread to the iliofemoral system. This syndrome is difficult to diagnose and is sometimes called “obscure” or “enigmatic” fever. These patients often have minimal symptoms, except for fever, and may not have pelvic pain. Diagnosis is by exclusion and confirmed by response to heparin. There is no specific diagnostic test.^{6, 7}

Based on this patient’s presentation with pelvic pain, low-grade fever, subsequently detected iliofemoral thrombosis, and prompt response to heparin, small-vein thrombophlebitis seems a reasonable explanation of this sequence of events. However, this is impossible to demonstrate conclusively. Computerized tomography scanning and venography have been used in an attempt to delineate both forms of pelvic thrombophlebitis but have not been adequately studied.^{6, 8, 9}

There is also no evident explanation of why small-vein thrombophlebitis might have arisen in this patient. She did not have pelvic infection and, while her use of oral contraceptives is a risk factor,¹⁰ one would not expect onset in the pelvis in the absence of pelvic infection, obstetric delivery

or recent pelvic surgery.^{6, 7} No reports of spontaneous pelvic thrombophlebitis without these risk factors were found in the literature. She also did not have any of the known risk factors, other than oral contraceptives, for thrombophlebitis in general.¹⁰ Her antithrombin-3 level was normal. Family history, antinuclear antibody, rheumatoid agglutinins, comprehensive lab profile and past history were also negative.

Conclusion

Most cases of acute pelvic pain resolve. However, in persistent, unexplained cases, the diagnosis and therapy may be quite challenging, requiring a comprehensive approach. In these cases, the possibility of thrombophlebitis may be a consideration.

REFERENCES

1. Droegenmueller W, Herbst AL, Mishell DR, Stenchever MA. *Comprehensive Gynecology* (St. Louis: C.V. Mosby Company, 1987), 614–42.
2. Goldstein DP, Pinsonneault O. Pediatric and adolescent gynecology. In: Danforth DN, Scott JR, eds. *Obstetrics and Gynecology*, 5th ed. (Philadelphia: J.B. Lippincott Company, 1986), 858–61.
3. Quan M. Chronic pelvic pain. *JFP* 1987; 25:283–88.
4. Beard RW, Reginald PW, and Pearce S. Pelvic pain in women. *BMJ* 1986;293:1160–62.
5. Beard RW, Pearce S, Highman JH, Reginald PW. Diagnosis of pelvic varicosities in women with chronic pelvic pain. *Lancet* 1984;2:946–49.
6. Duff P, Gibbs RS. Pelvic vein thrombophlebitis: Diagnostic dilemma and therapeutic challenge. *Obstetric and Gynecological Survey* 1983;38:365–73.
7. Sweet RL. Septic abortion: Septic pelvic thrombophlebitis. In: Sciarra D, Eschenbach D, Epp R, eds. *Gynecology and Obstetrics*, vol. 3 (New York: Harper & Row, 1987), 8–13.
8. Pawar SV, Kay CJ. Soft-tissue CT changes in pelvic venous thrombosis. *AJR* 1984;143:605–7.
9. Bauer AR, Flynn RR. Computed tomography diagnosis of venous thrombosis of the lower extremities and pelvis with contrast material. *SGO* 1988;167:12–15.
10. Janssen HF, Schachner J, Hubbard J, Hartman JT. The risk of deep venous thrombosis: A computerized epidemiologic approach. *Surgery* 1987;101:205–12.

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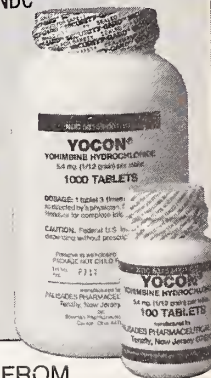
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References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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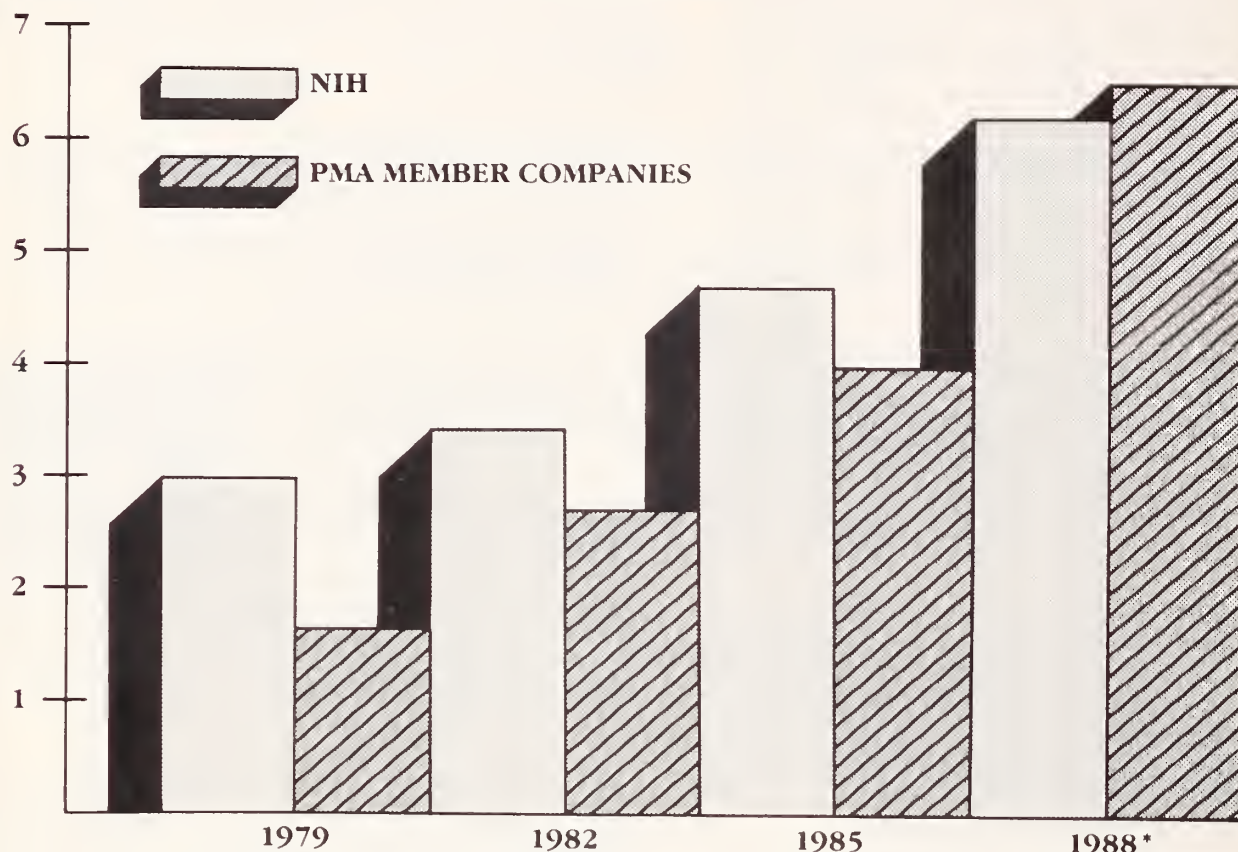
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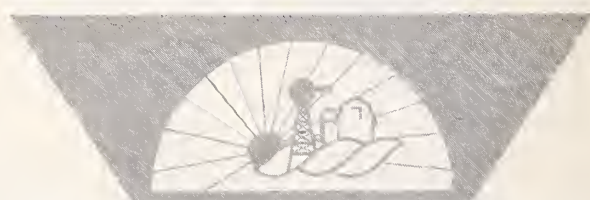
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Coronary Thrombolysis and Infarct Location

DONALD L. VINE, M.D.,* *Wichita*

In spite of the fact that two major trials comparing intravenous streptokinase with placebo for treating acute myocardial infarction are concordant in showing improved survival for patients with inferior infarction, there are physicians who argue that the benefits of treating inferior infarction with lytic agents are insufficient to justify the practice. A review of the available data may help to decide whether or not inferior infarction should be treated differently from anterior infarction when lytic therapy is being considered.

The trials

The reduction in mortality following intravenous lytic therapy of patients with acute anterior myocardial infarctions was convincingly demonstrated by the results of the Italian trial (GISSI^{1,2}), but the reduction in mortality for patients with inferior infarctions was statistically insignificant.

The second international trial (ISIS-2^{3,4}) confirmed the effectiveness of lytic therapy using streptokinase for the reduction of mortality following acute anterior infarction and also demonstrated a statistically significant reduction in the mortality associated with inferior infarction.

The combined trials include a total of 16,141 patients, 8,183 (51%) of whom suffered inferior infarctions. The GISSI trial consisted of 4,327 patients with anterior and 4,013 patients with inferior infarction. The ISIS-2 trial included 3,922 patients treated with streptokinase alone and 3,879 patients treated with streptokinase plus aspirin (ASA).

Mortality

With conventional treatment, the averaged early mortality is 8.8% for inferior and 19.4% for anterior infarctions. Following treatment with streptokinase or streptokinase plus aspirin, these mortalities are reduced to an average of 13% for

anterior and 8% for inferior infarction (Figures 1 and 2).

The absolute reduction in mortality is 6.4% for

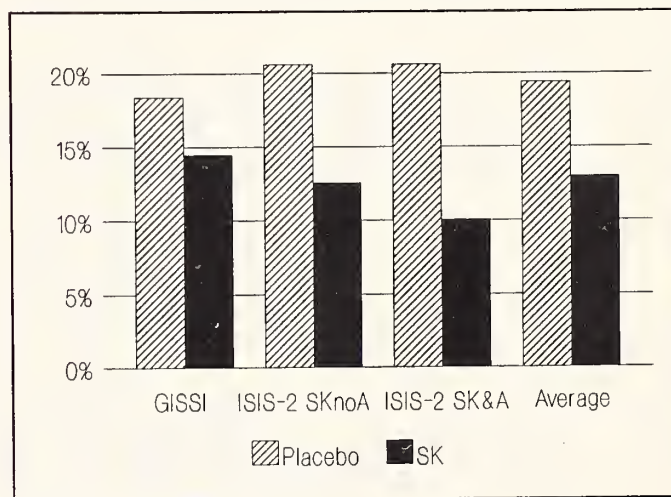


Figure 1. Mortality following anterior myocardial infarction, from the GISSI and ISIS-2 trials. (Abbreviations: SK = streptokinase, noA = no aspirin, &A = and aspirin.)

anterior and 1.8% for inferior infarctions (Figure 3). While each group showed a reduction in mortality for inferior infarction treated with streptokinase, the difference was statistically insignificant for the GISSI trial, borderline for the ISIS-

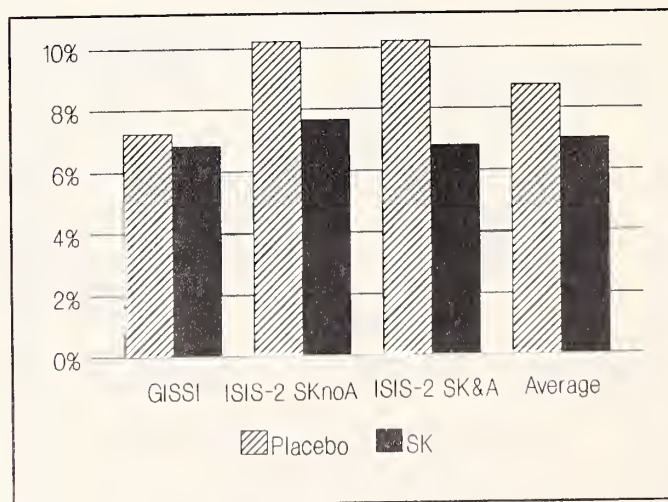


Figure 2. Mortality following inferior myocardial infarction. (Abbreviations same as in Figure 1.)

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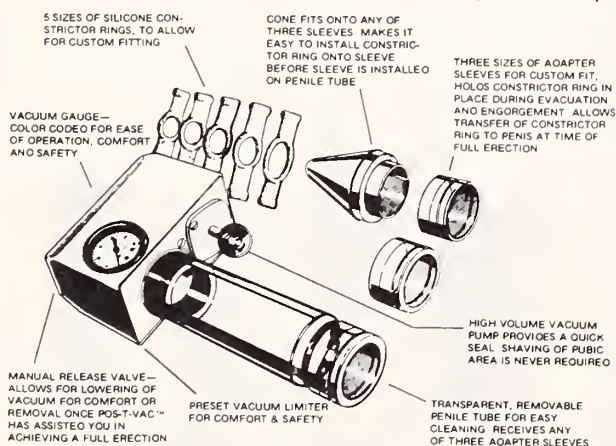
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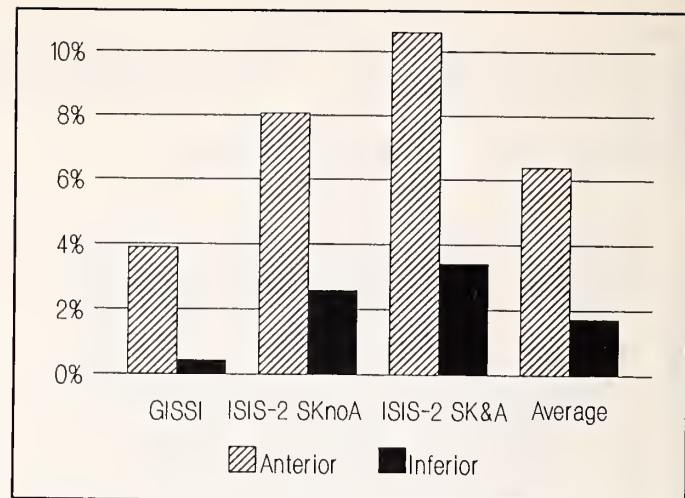


Figure 3. Absolute reduction in mortality for anterior and inferior myocardial infarctions following streptokinase infusion.

2 no ASA group and significant for the ISIS-2 with ASA group.

Comments

While a reduction in mortality limited to 1 or 2% has been argued by some to offset the risks of treatment, the incidence of strokes, at least, appears to be similar regardless of the use or non-use of lytic therapy,⁵ and the risk of hemorrhage requiring transfusion does not seem to offset the benefits demonstrated by ISIS-2.

The magnitude of the benefit of treating inferior infarctions is small, but the benefit is survival. At a time when great effort and money are being spent on cholesterol reduction with no demonstrated reduction in mortality, the treatment of inferior infarction with lytic agents seems appropriate and relatively cost-effective.

REFERENCES

1. Long-term effects of intravenous thrombolysis in acute myocardial infarction: final report of the GISSI study. Gruppo Italiano per lo Studio della Streptochinasi nell'Infarto Miocardico (GISSI). *Lancet*, Oct 17, 1987;871-74.
2. Effectiveness of intravenous thrombolytic treatment in acute myocardial infarction. Gruppo Italiano per lo Studio della Streptochinasi nell'Infarto Miocardico (GISSI). *Lancet*, Feb 22, 1986;397-402.
3. Randomized trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2. ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. *Lancet*, Aug 13, 1988;349-60.
4. Randomized trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2. ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. *J Am Coll Cardiol*, Dec 1988;3A-13A.
5. Tiefenbrunn AJ, Ludbrook PA. Coronary thrombolysis: It's worth the risk. *JAMA*, Apr 14, 1989;261:2107-8.

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Delegates' Reports
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ABOUT OUR LOGO

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

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Manuscripts must be typewritten, double-spaced, leaving wide margins. The original plus one copy should be submitted. Manuscripts are received with the explicit understanding that they are not simultaneously under consideration by any other publication. Publication elsewhere may be subsequently authorized at the discretion of the editor.

Brief, concise **articles** are preferred; an ideal manuscript will not exceed five double-spaced pages. All material will be edited by the editorial staff to assure clarity, good grammar and appropriate language, and to conform to KANSAS MEDICINE style and format. When feasible, material may be condensed.

The author will be asked to review the **galley proof** prior to publication. Although editing and proofreading will be done with care, the author is responsible for accuracy of material published. The galley proof is for correction of **ERRORS**; rewriting of material *must* be done prior to submission. Authors are urged to check manuscripts and galley proof carefully for errors that could result in inaccurate information.

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Last February, we celebrated the buffalo (bison to some) on our cover. This year, to continue on the bucolic theme, we decided to call on Jim Hamil's quiet scene of cattle pondering the ways of winter, and it led to the question of how, when and what breeds of cattle came to Kansas. We turned the matter over to our inquisitive production editor, with the following result. It appears that Connecticut Yankee has gone native.

Hang onto yer hat, Pardner, 'cause the trail ahead's as bumpy as a armadillo's back! We was tryin' to find out when yer diff'rent kinds a cattle come ta Kansas. Well, lemme tell ya: it ain't easy ta find out. In the first place, the Kansas Livestock Commission said I oughta talk to the fellers at the Kansas Livestock Association. Them folks tole me ta visit with the Kansas Agricultural Statistics — as if ya can visit with a dang statistic — an' them fellers says ta call the Kansas Livestock Association!

"I already done that," I says.

So they says why don't I call the Department of Animal Sciences at Kansas State Univer'sty? Now, that name's as long as Buffalo Bill Cody's lariat!

Say, did I ever tell ya 'bout the time Bill an' me . . . well, mebbe another time when there's no ladies listenin'.

Anyhoo, I didn't figger I had wind enough in me ta ask fer that place, so I says to m'self, "That lil' filly Dorothy Gale — the one who went over the rainbow — found what *she* was lookin' for in her own back yard. Mebbe I can, too."

So I called on the folks over t' the Kansas Historical Society. They was jest as nice and friendly as they could be, an' they had more books on Kansas livestock than Wyatt Earp had bullets. Why, I remember the time me an' Wyatt . . . oh yeah, the books.

Well, sir, there's enough byureecrats in Kansas now ta choke a horse, but back in the early days there wasn't no bean-counters writin' down who jest got a new bull an' what color it was. I never did learn who brung the first cattle into Kansas or when. But I did learn a few things about the olden days.

First of all, it was the Longhorn that come over

from Spain with Columbus an' hung around in Mexico until them missionary priests heard about all the red men who needed convertin' up north in Texas an' California. They brought their Longhorns with 'em. When cattle was first grazed on the plains an' herded to the railheads, they was still Longhorns — not much diff'rent from the critters that come over from Spain. Yards was built at Abilene in 1867, an' then as the railroads kept a-goin' west, the trail herds was took ta Wichita an' Dodge City. Say, didja ever see that Longhorn statue in Dodge? Mean lookin' cuss, ain't he?

Oh, them Longhorns was tough an' hardy, an' they could live on cactus in a pinch. There was jest two things wrong with 'em: they was short on meat an' long on horns! So them ranchers began crossin' 'em with Shorthorns they brung out from back east. Now they had a hardy critter with some meat on its bones. Trouble was, as they got longer on the Shorthorn and shorter on

the Longhorn blood, they wasn't so hardy anymore, and they was hard to herd.

Well, along come the Hereford. That's what

ya got in yer cover pitcher by the Hamil feller. Now, Herefords was jest about as hardy as

Longhorns, ya could herd 'em, an' best of all they fattened up quicker 'n a farm wife at a bake sale. Yessir, them Herefords was ready for market in two years, where it had took three to five years for the Longhorns an' Shorthorns.

One more thing. In 1960, the Hereford was honored by the Governor of Kansas — yep, that's right — for its "important role in improving the general health, nutrition and welfare of the nation and . . . buttressing the agricultural economy of the Sunflower State." Lotta big words that says the Hereford was one of the best things that ever come to Kansas.

An' I'll tell ya somethin' else. Didja ever wonder, as ya was gettin' gussied up fer th' American Royal, how that show come to be? Well, ya can thank the Herefords, 'cause the Royal started in October 1899 as the National Hereford Show and Sale. Maybe if they'd a had it in Dodge 'stead a Kansas City we wouldn't hafta curl them big critters' coats an' polish their hoofs to please the city slickers. "GABBY" WARD



The Right Thing — We Hope

It is impossible to observe medical practice in the late twentieth century without taking note of the increasing pressure of ethical considerations — often subtle, frequently intrusive, rarely comforting. This pressure has been increased by the seemingly secondary role such principles have played in adjusting the profession to the changes it has sought or brought upon itself until they can no longer be ignored but demand scrutiny, not just by the individual but by the whole profession. In a paraphrase of the well known comment on greatness, some are born ethical, some achieve ethicism, and some have it thrust upon them.



There was a time when the ethics of medical practice were of primary interest almost exclusively to physicians — and among them, only some individuals or groups specifically identified with particular disciplines. Though ancient history (local variety) now, we are reminded that the physicians' efforts to establish state testing and licensure for medical practice (with their implication for maintaining medical ethics) were for years thwarted or ignored by the Legislature. The civic representatives were content to let physicians be served by their own ethical standards (and, incidentally, not to intrude on those off-breed practitioners who had a firm hold on the lawmakers' constituents).

And, as a matter of fact, physicians were just as anxious to maintain their own professional and ethical autonomy. They weren't offering this for public control as much as attempting to eliminate those in "non-scientific" (though lucrative) pursuits. But the fact is that physicians have always had (or developed in some insensible fashion in their pursuit of their practices) a certainty that they *knew* what ethical performance was and functioned accordingly. Whether this is right or wrong, it demonstrates the insularity of philosophy that has become displaced as the social and medical revolution of the last fifty or more years has progressed.

There is increasing awareness on the part of the profession that ethical behavior (as practiced)

cannot be some fixed, immutable concept in the face of dramatic challenges and changes in the fundamentals of human function — or, at least, our recognition of them. Such changes often emerge on the practical or material level which then requires that we fit our ethical yardsticks to them. If we find it impossible to reconcile such changes to our ethical controls, it precipitates another debate about current ethical dictates and how we can accommodate their uncomfortable demands to our ideas of current need.

Age has always been a significant factor in ethical concepts. Scholars guide us by their expositions of ethical philosophies from the distant past — and presume a fundamental state of human intellect which requires that we respond in the pattern set down by those ancients as proof. But we live in a world of burgeoning numbers, a mobile world where a mixture of races is being progressively advanced as international barriers are lowered, and as transportation and communication instantly bring word of activities that would once have required decades for accomplishment. Rapid technical advances have posed ethical problems almost undreamed of but a few generations ago — and with computerized speed. But we are assured that true ethicism is unalterable and that we can discern the fundamental relationship of any current problem if we distill it down to the appropriate base.

This is by no means to decry the pursuit of ethical standards or deny those who have established them in the past. It is to suggest that the presumed character of those standards must be measured against this concept of immutability and its role in a world not dreamed of by those who established the roles we try to emulate. Granted, a denial or even temporary displacement of those guiding principles as we try to accommodate our lives to them or devise viable changes produces a rudderless state lacking in the comfort of their specious certainty.

Since we can hardly declare a moratorium on human thought or behavior, we seem to have no choice but to continue the struggle, a never-ending effort to define the right thing. **D.E.G.**

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Debt Collection

WAYNE T. STRATTON, J.D.,* *Topeka*

An area of increasing concern for physicians in private practice is the number of patients who fail to pay their debts in a timely fashion. While many offices have sophisticated methods of dealing with this problem, it is well to review several areas of concern for many physicians.



Once an account has been billed and remains unpaid for several months, the office must decide the steps to be taken next to effectuate collection. Inquiries will reveal whether there is a possibility of collecting from a third party, which could be either a public agency or an employer, attorney or insurance carrier.

If the patient sustains injury as a result of an automobile accident, a certain amount of medical expense will be paid, in many instances, through the personal injury protection benefits. If the patient has a claim against a third party, there currently is no provision giving the physician any direct claim to the settlement. If the patient is represented by an attorney, frequently the attorney will agree in writing to protect the physician at the time of the settlement by paying a portion of the proceeds to satisfy the physician's bill.

Physicians whose offices attempt collection of other types of claims must be aware that there are limitations upon what a creditor may do to collect a debt. The Kansas Supreme Court has recognized that in certain instances a debtor may sue a creditor for harassment. While the limits of permissible conduct remain unsettled and must be resolved case by case, the Court has said:

A creditor who by extreme and outrageous conduct intentionally or recklessly causes severe emotional distress to the debtor is subject to liability for such emotional distress, and if bod-

ily harm to the debtor results from it, for such bodily harm. In a debtor-creditor relationship, the actions of the tort-feasor are compensable when they would be highly offensive to a reasonable man.

Furthermore, the Court has recognized an action for the invasion of privacy:

Q: *What can a physician do to collect a delinquent account?*

One who intentionally intrudes, physically or otherwise, upon the solitude or seclusion of another, or his private affairs or concerns, is subject to liability to the other for invasion of his privacy, if the intrusion would be highly offensive to a reasonable man.

The Court has recognized, however, that the business community must be given some latitude to pursue reasonable methods of collecting debts, even though the methods might result in some inconvenience or embarrassment to the debtor. The debtor's tender sensibilities are protected only from oppressive, outrageous conduct.

In the case mentioned above, the debtor was a woman with multiple sclerosis. She was repeatedly called by the creditor and threatened with having her credit ruined. The creditor suggested that her failure to pay the bill could hurt her parents in their business. She became emotionally upset, and her physical condition worsened. She had difficulty with speech, bladder control and holding objects such as dishes, and was hospitalized. Other courts have indicated that repeated phone calls, often late at night, and calls to the employer are examples of outrageous conduct.

It is extremely important that physicians' front offices not include references to their collection efforts with the medical chart. If a chart is released to a third party and contains references to the debtor's character or failure to pay the bill, lia-

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

(Continued on page 48.)

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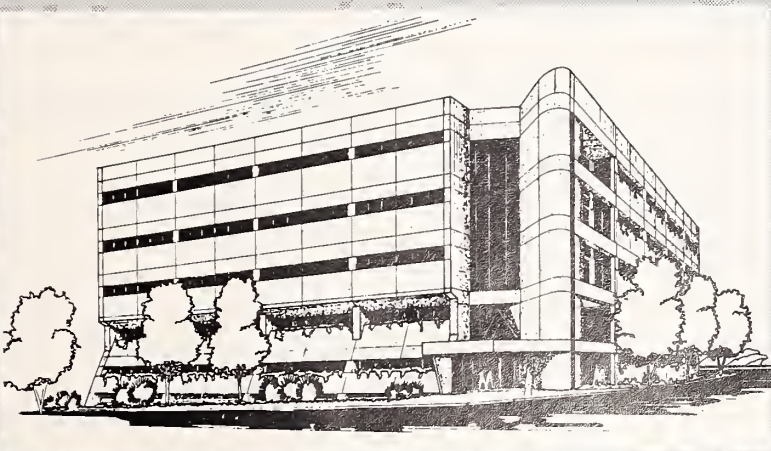
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Interim Meeting of the AMA House of Delegates

The AMA House of Delegates met in Honolulu, December 3 through 6, 1989. This was a very busy meeting, with 187 resolutions and 79 Board and Council reports to consider. The House took positions on some far-reaching issues of vital importance to practicing physicians. There were 435 delegates seated, including six from Kansas.

Lauro F. Cavazos, Ph.D., U.S. Secretary of Education, addressed the opening session of the House of Delegates. A former medical school dean, Dr. Cavazos called upon the delegates for assistance in improving and restructuring our nation's system of education to provide early childhood education; safe, drug-free schools for all of America's children; and support for teachers from physician volunteers.

The House of Delegates approved a comprehensive report of the Board of Trustees (Report QQ), which responded to recent **incidents involving AMA personnel** that were reported in a Chicago newspaper. The report outlined the results of the investigation conducted by independent legal counsel and listed several actions by the Board to assure the continued exercise of its fiduciary responsibilities. (The complete report appears on page 34 of this issue.)

The House approved a major policy update on the medical, legal and social implications of **AIDS and HIV infection**, including recommendations on contact-tracing and notification of needle partners; a study of cost of care for patients in each stage of HIV infection; asking federal and state agencies to establish rigorous proficiency testing and quality control procedures for testing labs regularly and frequently; reaffirming its commitment to mandatory testing of inmates in federal and state prisons and support of mandatory testing of all newborns in high-prevalence areas; encouraging state legislation to establish requirements for reporting and case follow-up for serious contagious disease, including HIV infection; and recommending that the FDA not allow home test kits for HIV.

On the subject of **drug abuse** in the United States, the House considered a Board report recommending, among other things, that the AMA:

- Encourage the development of model alcohol and drug treatment programs, complete with an evaluation component, that are designed to meet the special needs of pregnant women through a comprehensive array of essential services;
- Urge physicians to routinely screen all pregnant women, and those of childbearing age, for drug and alcohol use, and to follow up positive screens with appropriate interventions and referrals;
- Pursue the development of educational materials for physicians and the public on prevention, diagnosis and treatment of perinatal addiction. In this regard the Board encourages further collaboration with the Partnership for a Drug-Free America in delivering appropriate messages to health professionals and the public on the risks and ramifications of perinatal drug and alcohol use;
- Affirm the concept that substance abuse is a disease and develop model legislation to appropriately address perinatal addiction as a disease, recognizing that: substance abuse is the major health problem in the United States today, and that its solution requires a multifaceted approach; declaring substance abuse its number-one public health priority; and studying innovative approaches to the elimination of substance abuse dependencies and their resultant street crime.

The House approved a report that discusses the legal and ethical issues created by the **freezing of human pre-embryos** and offers guidelines as to the rights of the gamete providers and the disposition of the pre-embryos.

Regarding **Yellow Pages advertising**, the House adopted a resolution that called upon the AMA to urge the American Board of Medical Specialties (ABMS) to abandon the entrepreneurial endeavor of placing display advertisements in the major Yellow Pages telephone directories where board-certified specialists are located. The House also insisted that truth in advertising demands that ABMS state to all callers that their display listings may not represent a complete listing of all board-certified specialists. —→

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Health insurance coverage for the uninsured received considerable debate. The House adopted a resolution that addressed the problem of an estimated 37 million Americans without health insurance. Introduced by the American Academy of Family Physicians, the resolution called upon the AMA to reaffirm its support for ensuring access to health care for the uninsured through a combination of employer-sponsored coverage and other private approaches, such as risk pools and the AMA-proposed restructuring of Medicaid and Medicare programs. The resolution also asked the AMA to pursue aggressively the implementation of a program ensuring health care access for the uninsured as a high legislative priority beginning in the 101st Congress.

In a related action, the House approved a resolution, introduced by the Hospital Medical Staff Section, calling for an AMA study of health insurance coverage for the uninsured "dependent" population.

A number of resolutions addressed physician dissatisfaction with the referral of Medicare, Medicaid and most private payors to allow solo practitioners to **bill for services provided by covering physicians**. The House approved a policy calling on the AMA "to pursue all appropriate legislative, regulatory and administrative means to amend or eliminate the inappropriate enforcement of the Social Security Act and/or Medicare regulations in order to make it possible for physicians in solo or group practice to bill and receive payment for professional services to their Medicare patients rendered by colleagues who provide them with traditional short-term coverage."

Several state delegations co-sponsored a resolution asking the AMA to continue to adequately fund and maintain an **impaired physicians program** or "physicians' assistance program." The resolution, which was adopted as amended, directed that the charge of the program will include, but not be limited to,

- promoting state medical society impaired physician programs and medical student impairment programs;
- providing technical assistance to state programs;
- conducting scientific and socioeconomic research; and
- hosting an annual conference to share research and exchange ideas in the field of physician impairment.

Many other issues addressed at this meeting were of critical importance to the practicing physician. For specific issues, please contact one of your delegates, listed below. The next meeting of the AMA House of Delegates will be held in Chicago, on June 24 through 28. Any member is encouraged to participate, but if you cannot attend the meeting, you can still be represented through your delegate. Let your delegation know your opinions. You can also prepare a resolution and request that it be submitted to the House. The Kansas Medical Society's delegates are:

F. Calvin Bigler
Garden City

Jimmie A. Gleason
Topeka

Lew W. Purinton
Wichita

Alex Scott
Junction City

Linda D. Warren
Hanover

Kermit G. Wedel
Minneapolis

REPORT OF THE BOARD OF TRUSTEES **Report: QQ (I-89)**

Background

At each meeting of the Board of Trustees, the Finance Committee reviews the financial statements, investment reports, membership of the Association and receives an economic status forecast. In addition, the AMA has employed outside auditors who annually provide the Board with an analysis of AMA finances and financial transactions to assure that financial policies and procedures are being followed and that controls are adequate. The Finance Committee reports its findings and recommendations to the full Board. Similar information is provided to Reference Committee F of the House of Delegates quarterly.

The AMA received an inquiry from Chicago media on October 16, 1989, concerning certain AMA financial matters. AMA staff began an investigation of the matters. One of those financial matters concerned a 1987 payment by the AMA to Whalen M. Strobhar, then AMA Chief Operating Officer. Strobhar had informed John E. Turner of AMA Advisors on October 15, 1987, that money from his Executive Variable Benefit Plan ("EVBP") money market investment had been transferred into the stock market and demanded that it be returned to the money market fund. The EVBP was a deferred compensation plan available to senior AMA executives which has since been terminated. Strobhar contended that the AMA had made an error in the transfer

and that he deserved to be made whole for losses he incurred in the stock market decline. Because transfers were only allowed at month's end, Strobhar, with Turner's support for the claim of error, sought and received approval from Executive Vice President James H. Sammons, MD, for a mid-month transfer and reimbursement for his losses based upon the claim of AMA error. Strobhar was reimbursed \$353,826 and the Board of Trustees was not informed of the transaction.

The results of the staff investigation of this incident including facts contradicting Strobhar's claims, were presented via conference call to the Board of Trustees by the Executive Vice President and the General Counsel on October 26, 1989.


On October 27, 1989, Strobhar resigned, saying he would repay the \$353,826 with interest. On October 28, 1989, an article about the Strobhar matter appeared in the *Chicago Sun-Times*. Strobhar has not yet repaid the funds.

This event focused the collective and very substantial concern of the Board on the adequacy of the AMA's fiscal policies, audit procedures and reports, financial information regularly available to the Board, and specific events reflecting AMA financial transactions.


Board Actions

On October 28, 1989, the Board retained the firm of Jenner & Block as independent legal counsel, directing that an independent investigation be conducted and a report made to the Board concerning reimbursement from the AMA Reserve Funds to the Executive Variable Benefit Plan account of Whalen M. Strobhar for losses incurred during the period October 1 through October 20, 1987. The Chairman also called a special meeting of the Board. Jenner & Block began its investigation the following morning.

A special meeting of the Board was conducted on November 2, 1989, at which time an interim confidential report of the independent legal counsel was presented to the Board. The Board authorized Jenner & Block to continue its investigation and to review all financial information it deemed appropriate. Further, the Board authorized Jenner & Block to retain the services of outside accountants and to undertake comprehensive reviews of the financial controls of the AMA, the structure, functions and information systems needed by the Board and its committees, and the relationships between the EVP and the Board of Trustees and its committees.




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Background

A November 19, 1989, *Sun-Times* article disclosed the fact of a loan authorized by Dr. Sammons to a deputy executive vice president, Richard A. Noffke, for the purchase by Noffke of a home. The AMA secured the loan with a mortgage on the home. After Noffke's termination by the AMA, he failed to pay the loan as required and the AMA foreclosed on the loan. The Board was not informed of the loan or the foreclosure litigation.

Board Actions

The Board directed a broad expansion of Jenner & Block's investigation into the financial affairs of the Association including the matter of the AMA loan to Richard Noffke.

On November 20, 1989, the Board directed that the EVP enter into no financial arrangements or dealings on behalf of the Association with any employee or former employee where the arrangement is extraordinary in nature or involving a substantial amount of funds without express consent of the Chairman.

The Board met in executive session November 29, 1989, and received Jenner & Block's report on its investigation of the Strobhar and Noffke matters, its conclusions and recommendations. The Board intends to maintain the confidential and privileged nature of that report.

In summary, the Board finds that:

- A. The AMA personnel actions accepting the resignations of Whalen M. Strobhar as President of AMA Services, Inc. and John E. Turner as Executive Vice President of AMA Advisors were appropriate.
- B. Dr. Sammons authorized the transfer of AMA Reserve Funds to the EVBP account of Whalen M. Strobhar and authorized a loan of AMA funds to Richard A. Noffke.
- C. In engaging in financial transactions of this magnitude, the EVP acted within the scope of his authority existing at the time of his actions. In doing so, however, in both instances the EVP failed to follow the usual fiscal policies and procedures in existence and known to him at the time of his actions. The EVP failed to assure that an internal investigation into the Strobhar EVBP error was undertaken in 1987. The EVP also failed to communicate both of these extraordinary financial decisions to the Board of Trustees.

The following actions have been taken by the Board to assure the continued exercise of its fiduciary responsibilities:

1. Jenner & Block will continue its broad investigation and expand it as they recommend and the Board deems necessary, and will report to the Board.
2. AMA General Counsel has been directed to continue to take all appropriate action necessary to recover any and all funds due the AMA. It is unlikely that there will be full recovery of funds lost from the Noffke transaction.
3. To strengthen Board oversight of the Association and to define limitations of EVP authority, there will be a restructuring of Board committees to include:
 - a. A Finance Committee with broad authority to review and monitor the fiscal policies, procedures, and finances of the Association.
 - b. An Audit Committee to review and monitor the auditing activities of the Association.
 - c. A Compensation Committee to review performance and authorize the compensation of senior staff.
4. The Board directed that new outside auditors be retained for 1990.
5. The Board recognized the strong leadership of and contributions to the Association by Dr. James H. Sammons since he became EVP in 1974.
6. To improve the operation of the AMA, the Board will formulate and institute specifically defined limits upon the authority of the EVP in respect to monetary, compensation and health policy matters to conform to the exercise of the Board's fiduciary responsibilities.
7. All expenditures, unless otherwise budgeted, in excess of \$100,000 shall be approved by the Chairman of the Board.
8. AMA policies on providing loans to employees shall be evaluated and defined by the Board.
9. The Board reaffirmed the value of the present activity of Reference Committee F, a special reference committee of the House of Delegates meeting quarterly with the Finance Committee, to maintain uniform fi-

(Continued on page 48.)



FEBRUARY 1990

LONG-TERM CARE: DRUG THERAPY

The proposed regulations for nursing homes emphasize the need for judicious use of drug therapy with emphasis on unnecessary drugs. The term "unnecessary drugs" has been defined in Interpretive Guidelines as:

drugs that are given in excessive doses, for excessive periods of time, without adequate monitoring, or in the absence of a diagnosis or reason for the drug. An unnecessary drug is a drug for which monitoring data, or undue adverse consequences, indicate that the drug should be reduced or discontinued entirely. An unnecessary drug is also one which is prescribed only in anticipation of an adverse consequence of another prescribed.

The surveyor will review the drug regimen for those residents identified as "targeted residents." Guidelines, which will include specific drugs and dosages, will be developed for determining unnecessary drugs. Guidelines have already been developed for antipsychotic drugs. According to the current guidelines, an antipsychotic drug should not be used unless there is a diagnosis or documentation of behavior in the clinical record which justifies the use of the drug.

The consultant pharmacist is responsible for performing a drug review on each resident monthly. Included in this task is the determination that all drug orders are supported by a medical diagnosis or that documentation in the clinical record indicates the need. The pharmacist is mandated to notify the attending physician and/or director of nursing of any irregularities identified in the drug review. These reports must be acted upon, and the physician must document a response to the recommendation(s) of the pharmacist.

The primary reason for these regulations is to ensure that the residents in nursing facilities do not receive unnecessary drugs. The Institute of Medicine (IOM) report Improving the Quality of Care in Nursing Homes indicated that overmedication was a significant problem in nursing homes. These regulations are a reflection of the recommendation of the IOM report.

COVERAGE OF NSAIDs

SRS has reversed its January 15, 1990 non-coverage of non-steroidal anti-inflammatory drugs (NSAIDs). Prescriptions for these medications can be filled without delay if prescribed for:

- * a diagnosis of a specific arthritic condition, or
- * a diagnosis, and two other generic products have been used and found to be ineffective or not tolerated.

Physician certification of the above assessment is to be an-

notated either on the prescription or by telephone to the pharmacist. The documentation will be retained in the pharmacy's files as a line on the prescription, attached to it. The coverage of NSAIDs under these conditions is retroactive to January 15, 1990. In addition, all other drugs that were deleted effective January 15 are retained on the Medicaid formulary as covered products.

IMPORTANT: SOLE-SOURCE NSAIDs can be dispensed only with appropriate documentation as stated above.

DUR COMMITTEE SEEKS PHYSICIAN MEMBER

The Drug Utilization Review Committee is looking for an additional physician member. A family practice specialist is needed. The committee membership is composed of three pharmacists, one pharmacologist, one pharmaceutical chemist, one pediatrician, one internist and one R.N. It is chaired by Bradley W. Marples, M.D., Topeka. Meetings are held in Topeka monthly, on the second Wednesday. An honorarium and travel expenses are paid. Interested individuals should contact the Kansas Pharmacists Association, 913-232-0439.

ASSISTANCE WITH HYPERTENSION FROM AMA/Net

A new service available on AMA/Net, the AMA's online physician database, will assist physicians in selecting drug therapy for non-hospitalized hypertensive patients.

HT-Advisor is an artificial-intelligence program. To use it, physicians supply patient information including current blood pressure, co-existing medical conditions, the current drug regimen and the proposed drug regimen. HT-Advisor will then provide comments which physicians may use to assist in the patient's management.

Other programs available on AMA/Net include diagnostic assistance, drug interactions, literature search, electronic mail and bulletin boards and information services from state and specialty medical societies.

ENHANCED MEDICAL KITS NOW REQUIRED ON DOMESTIC AIRLINES

An enhanced medical kit is now required on all U.S. commercial aircraft. The kit contains a sphygmomanometer, three oropharyngeal airways, six needles, two doses of epinephrine 1:1000, ten nitroglycerin tablets, a stethoscope, four syringes, 50ml dextrose, two diphenhydramine injectable and an instruction book. Some also contain a medical record form and a face mask for mouth-to-mask ventilation.

When an in-flight emergency occurs, the cabin crew makes an initial assessment of the patient. If medical assistance is warranted, a crew member makes an announcement over the cabin address system. If a physician is not available to volunteer, a nurse or paramedic may use the kit, at the discretion of the captain. All health care providers must show some form of identification.

In a recent one-year study on a domestic airline, nearly 70% of the 362 medical emergencies for which the kit was used fell into these categories: syncope/near syncope, cardiac/

chest pain, asthma/lung disease/shortness of breath and allergic reactions.

MEDICAL LIBRARY'S ONLINE CATALOG MAY BE ACCESSED WITH A PC

If you live in Wichita and have a personal computer, you can now access the catalogs of the George J. Farha Medical Library at UKSM-W and the Archie R. Dykes Library, Logan Clendening History of Medicine Library and Calkins Educational Research Center in Kansas City.

Users can retrieve information from the catalog through the KUMC Information Systems Network or by using a modem with a personal computer by dialing 316-261-2663. For a brochure or information about personal computer use, call the Farha Medical Library at 316-261-2629.

HIGH-FIBER DIETS SHOULD BE VARIED AND INTRODUCED GRADUALLY

Some patients may experience problems if they switch suddenly to a high-fiber diet, according to an article in a recent issue of JAMA. A man who was instructed to eat a large bowl of bran cereal every morning to relieve constipation developed a large mass in his bowel, which was removed surgically. The authors of the article suggest that, to avoid such complications, a high-fiber diet should consist of several recommended foods, such as fruits, vegetables, legumes and whole grain breads, rather than just one source of fiber. The increase in fiber should be introduced gradually over a four-to six-week period, and patients should be advised to drink more liquids.

PATIENT INFORMATION BROCHURES

Your Number Counts: A Guide to Controlling Your Cholesterol is a pamphlet designed for patients with mildly elevated cholesterol levels. It contains a brief explanation of cholesterol and guidelines for reducing cholesterol in the diet, including a 2,000-calorie diet plan. You may order these brochures in any quantity at no charge by calling Linda Griswold at the Niacin Information Center, 516-829-3260.

Do I Have an Ulcer? explains what ulcers are, what causes them and the consequences of ignoring their symptoms. If you would like some of these brochures for your waiting room, call Smith, Kline & French at 800-333-PAIN.

LAST CALL TO REGISTER FOR MEDICAL ASSISTANTS SEMINAR

The deadline for registration for the Kansas Medical Assistants Society spring seminar is March 10. The seminar will be held on Saturday, March 17 from 10:00 to 5:00 at the Olathe Medical Center Doctors' Building, Suite 203, Olathe. Two attorneys will speak on legal responsibilities of medical assistants, medical records and prescriptions. Credit for 6 CEUs has been applied for. To register, call Liane Hower at 913-782-3377.

BOARD OF MEDICAL EXAMINERS OBSERVES 75TH ANNIVERSARY

The National Board of Medical Examiners will observe its 75th anniversary with an invitational conference, entitled NBME Priorities for the Twenty-First Century: Nurturing and Measuring Quality, to be held in Philadelphia on March 29.

CONFERENCES

Sleep Disorders in the Elderly, an NIH consensus development conference, will be held in Bethesda, Maryland, March 26-28. The purpose of the conference is to determine what changes in sleep are clinically important, how they are best diagnosed and treated, and how the public can establish good sleep practices. For more information, call the NIH at 301-496-1143.

Primary Care Research: An Agenda for the 90s will be held March 28-30 in Colorado Springs, Colorado. Sponsored by the Agency for Health Care Policy and Research, the conference is intended for those who are interested in research, policy and programs relating to primary care. For registration information, call Elaine Kokiko at 301-229-3000.

EEWWW! LEECHES!!

Yes, they're back--and at KUMC! Medical leeches are being used on a few patients following microsurgery or plastic surgery to eliminate buildup of blood in areas where tiny blood vessels cannot be reconnected. Each Hirudo medicinalis draws off 3 to 5cc of blood before dropping off the wound after 20 to 60 minutes of feeding. But because of an anti-coagulant injected into the puncture by the leech, the wound will continue to bleed slightly for the next 24 to 72 hours, resulting in a total loss of about 50cc of blood. Because leeches produce a natural anesthetic, their bites do not hurt. Nevertheless, many patients are reluctant to submit to this therapy. So researchers are studying the content of leeches' salivary glands in hopes of developing products that will yield the same beneficial effects in a more aesthetically pleasing manner....Care to help us locate the salivary glands in this leech?

HEALING MACHINES

A traveling show now at the Spencer Museum of Art at KU may be of some interest to physicians. The Healing Machines: The Art of Emery Blagdon features the work of a Nebraska farmer who, at age 48, gave up farming and began to create intricate sculptures from found materials such as copper wire, machine parts, aluminum foil, wood, and plastic beads. He termed these folk art creations "healing machines" because he believed they emitted an aura or electromagnetic field, each piece having slightly different properties. Put all together in the shed on his farm, these sculptures (eventually there were 600 of them) formed a huge "machine," which Blagdon believed possessed healing powers for the treatment of various diseases. In fact, he gave "treatments" for rheumatism and arthritis to local people, many of whom said they felt some relief afterwards.

Admittedly, we have both feet planted firmly on the ground and are skeptical about this sort of thing. So, as might be expected, we felt nothing unusual while inspecting a roomful of Blagdon's sculptures on a recent Saturday afternoon. However, another visitor, undoubtedly much more experienced at tuning in to auras and such, announced that she could "feel the power" of the sculptures, and that the room was "filled with energy." We just picked up our crystals and went home. If you'd care to try your luck, the healing machines may be seen through March 16 from 8:30 a.m. to 5:00 p.m. Tuesdays through Saturdays, and from 12:00 to 5:00 on Sundays.

Resident Physicians Section, AMA House of Delegates

We recently represented the residents of Kansas at the AMA-RPS Interim Meeting. As always, it was an honor and a privilege. We want to make you aware of some of the topics of discussion.

One of the continuing major issues discussed was **medical education reform**, including residency work hours and call limits. The assembly continued its push for a nationwide resident work-hour limit of 80 hours per week, averaged over four weeks. This recommendation has been forwarded to the AAMC. The AMA also has adopted a policy of resident call no more than every third night on average.

Another issue of general interest was **student loan deferment** during residency and re-establishing the tax deduction for educational loans.

The AMA has pledged to lobby Congress in support of these efforts.

Other RPS issues supported by the AMA included: warnings against alcohol use during pregnancy, strengthening tobacco and alcohol warning labels, encouraging recycling efforts, abolition of chemical and biological weapons, and many others.

Dr. Hacib Aoun, a resident of Johns Hopkins who contracted AIDS from a shattered vial of blood while on duty, addressed the assembly on occupationally acquired AIDS and the risks we face as house officers. His speech was extremely informative and moving. Among his recommen-



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RESIDENT DELEGATES' REPORT

(Continued from page 37.)

dations to residents: adhere to universal fluid and secretion precautions, determine your residency benefits (health and disability insurance) to ensure coverage should a chronic occupationally acquired disease occur, continue supporting AIDS research and the empathic care of AIDS patients.

We look forward to representing Kansas' Resident Physician Section again at the AMA Annual Meeting in Chicago in June. If you have a particular issue which you would like to put before the assembly, or would like a more active role in the AMA-RPS, please contact one of us at the number below. We also want to thank the Kansas Medical Society for their generous support of the Resident Physician Section. They not only support RPS efforts locally, but also make this national representation possible.

Deborah Hurley, M.D.
Kevin Hoppock, M.D.
316-688-3070

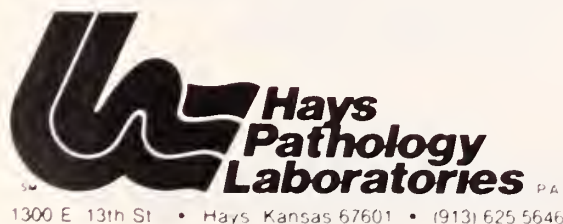
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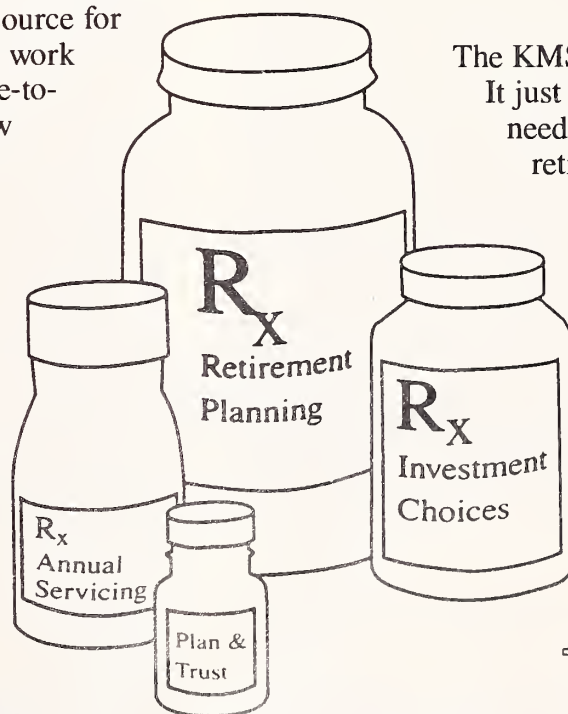
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Hyperglycemia, Ketosis and Mild Metabolic Acidosis in Two Patients Subsequently Found Not to Require Insulin

MICHAEL L. O'DELL, M.D.,* *Kansas City*

Non-insulin-dependent diabetes mellitus (NIDDM) is by definition a disease which is not "ketosis prone." Episodes of ketosis, in particular those accompanied by evidence of acidosis, are felt to be rare and usually associated with precipitating causes.¹ The majority of non-insulin-dependent diabetics experiencing such episodes are felt to be those with more serious disease. Usually patients with more serious forms of NIDDM require insulin, although they are not insulin dependent.²

We have seen two patients who presented with elevated blood glucose, marked ketosis and elevated anion gap metabolic acidosis and who have subsequently — months later — not required insulin or other medication. Neither patient was known to be diabetic prior to the onset of hyperglycemia and ketosis with metabolic acidosis. Neither of the two patients was felt to have had an underlying precipitating cause that would explain the episode.

Cases similar to these have rarely been reported. Generally, diabetic patients who present with hyperglycemia and ketosis with metabolic acidosis remain insulin-requiring. Episodes of ketosis, not related to starvation, are generally secondary to insulinopenia. Recovery of pancreatic insulin secretory function following an episode of ketoacidosis has been noted, however.³ The ability to assess endogenous insulin production, either by direct measurement of insulin or by measurement of C-peptide, a proinsulin cleavage product, might allow prediction of future insulin requirements. In both of the cases presented, determination of

C-peptide levels proved useful in predicting the patients' future insulin requirements.

Peck et al., in 1958, described transient, but severe, diabetes in a 41-year-old black male.⁴ The patient in this case experienced profound ketoacidosis, with coma and shock, and required insulin therapy. Within two months the patient no longer required insulin and, at follow-up three years later, remained without evidence of diabetes.

Rendell et al., in 1981, reported four patients with new-onset diabetes, all of whom were eventually felt to be non-insulin-dependent diabetics, who presented with decompensated hyperglycemia, ketosis and evidence of acidosis.² Two of these cases had precipitating causes for decompensation. All four of Rendell's patients were noted to have relatively normal fasting blood sugars several weeks to months later, but HbA1C levels were not reported. Rendell also noted the usefulness of C-peptide determinations in following patients who are found to be decompensated but believed to be non-insulin-dependent diabetics.

Cheng et al., in 1953, reported a well documented case involving a 68-year-old black female who was severely hyperglycemic and ketoacidotic on presentation, but who, five months later, no longer required insulin therapy. In this case, the length of follow-up was quite brief, although glucose tolerance testing appeared normal at five months. Cheng et al. also briefly commented on the case of a 10-year-old boy, lost to follow-up after one year, who appeared to have had spontaneous resolution of insulin-requiring diabetes.⁵ Little information was provided on this second patient, who may well have been in the "honeymoon phase" of his diabetes.

Harwood, in 1957, described the recovery of a 24-year-old male following an episode of severe diabetes and ketoacidosis. Harwood noted heavy alcohol consumption prior to the episode. Carbohydrate intolerance persisted after insulin with-

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drawal but was manageable with a "strict" diet, and insulin was not required long-term. Harwood alludes to the possibility that early, aggressive management with insulin may play a role in recovery.⁶

Patient 1 was 48 years of age at presentation in September 1987. He had experienced a 20-pound weight loss over the previous three weeks. He complained of constant thirst. He also stated that he was urinating frequently and experienced nocturia three to four times nightly. He was mildly nauseated but did not complain of fever or other signs of an infectious process. He had undergone an open fixation of a nonunion of a tibial fracture 41 days before his presentation in September. At the time of presentation, there was no abnormality of healing of the fracture to explain his hyperglycemia, ketosis and metabolic acidosis. A benign prostatic nodule had been biopsied in the spring of 1987. He did not have a prior history of diabetes. He was on no medications. A younger brother and his mother were diabetic. He stated he smoked one pack of cigarettes per day and denied alcohol or other drug abuse. His history was otherwise not contributory.

At admission his blood pressure was 114/72 mm Hg, his pulse was 96 beats per minute, respirations were 16 per minute, and he weighed 77 Kg (120% of ideal body weight). He was afebrile. He was alert and oriented. His examination at the time of admission was remarkable for dry mucous membranes and a left leg cast from the orthopedic procedure. Pertinent laboratory findings are presented in Table 1. He was felt to be in mild to moderate diabetic ketoacidosis and was initially treated with an insulin infusion.

Resolution of his elevated glucose and ketones occurred over the next several hours. His HbA1C level was 19.8% on a sample drawn at admission. A C-peptide level drawn after stabilization was 2.6 ng/ml. He was discharged seven days after

admission with a diagnosis of insulin-dependent diabetes mellitus (IDDM) and resolved diabetic ketoacidosis. His insulin dosage at the time of discharge was 16U NPH and 12U regular insulin before breakfast and 6U NPH and 3U regular insulin before evening meals. The patient began experiencing hypoglycemic episodes four days after admission, requiring reduction of his insulin therapy. Hypoglycemic episodes continued to occur, with rapid reduction of his insulin dose, until such therapy was discontinued 53 days after initial admission. His diagnosis was no longer felt to be IDDM and was changed to non-insulin-dependent diabetes mellitus (NIDDM). He remains quite well controlled and does not require medication. A HbA1C obtained 197 days after admission was 5.6%. The patient has not lost a significant amount of weight since admission, but also has not regained the weight lost prior to admission.

Patient 2 was a 54-year-old black male, who was a new patient to our service when admitted in July 1988. He had noted a 15-pound weight loss over the previous two weeks. He complained of tiredness and malaise, as well as frequent urination and thirst. He had also experienced blurred vision. He was taking medication for hypertension, which consisted of captopril 150 mg twice daily and hydrochlorothiazide 25 mg/triamterene 50 mg daily. He did not have a prior history of diabetes, but a brother was diabetic. He denied heavy alcohol or any drug abuse. He denied other complaints. At admission his blood pressure was 140/100 mm Hg, his pulse was 100, and his respirations were 16 per minute. He was afebrile. On examination at the time of admission, dry mucous membranes and rapid breathing were noted. The examination was otherwise unremarkable. Pertinent laboratory findings at admission are presented in Table 1.

The patient was admitted for what was believed to be a hyperosmolar state with mild ketoacidosis

TABLE 1
IMPORTANT FINDINGS AT PRESENTATION

Factor	Patient 1	Patient 2
1. Actual Weight/Ideal Weight	77 Kg/64 Kg	93 Kg/68 Kg
2. Blood Glucose	548 mg/dl	700 mg/dl
3. Urine Ketones	3+	3+
4. Serum Ketones	moderate	moderate
5. Anion Gap	17	25
6. HCO ₃	19	18
7. pH	7.4	7.34
8. C-Peptide	2.6 ng/ml	3.7 ng/ml

secondary to diabetes. An insulin infusion was started. The dose of captopril was reduced to 50 mg twice daily, and hydrochlorothiazide/triamterene was discontinued. The patient was initially treated with an insulin infusion. Resolution of his elevated glucose and ketones occurred over the next several hours. His HbA1C level was 22.4% on a sample drawn at admission. A C-peptide level drawn after stabilization was 3.7 ng/ml. He was discharged seven days after admission with a diagnosis of mild diabetic ketoacidosis and hyperosmolar state secondary to "adult-onset diabetes." His insulin dosage at the time of discharge was 20U insulin 70/30 mix of NPH and regular before breakfast and 10U insulin 70/30 mix of NPH and regular before evening meals.

The patient was thought to be "a little too tightly controlled" seven days after discharge. This required reduction of his insulin therapy. Home glucose checks frequently revealed blood sugars in the 50 mg/dl range. Rapid reduction of his insulin dose resulted until such therapy was discontinued 55 days after initial admission. Glyburide 2.5 mg daily was instituted, but was discontinued by 104 days following admission. He has lost 8.5 kg and remains quite well controlled without medication. A HbA1C obtained 305 days after admission was 9.5%.

Discussion

A lack of insulin, combined with other metabolic derangements, leads to gluconeogenesis and production of β hydroxybutyrate and acetoacetate (ketones). Gluconeogenesis and production of ketones culminates in hyperglycemia, ketosis and metabolic acidosis. In the past, it was thought that patients presenting with elevated blood glucoses, who were in ketoacidosis, had severe and irreversible pancreatic beta cell insulin secretory failure. Block et al. studied seven diabetics recovering from ketoacidosis and found varying degrees of recovery of insulin secretory function, as assayed by C-peptide levels. Block concluded that, at least in some patients, there is a functional impairment of insulin secretion associated with ketoacidosis, rather than an irreversible destruction of secretory ability.³

The accurate determination of a hyperglycemic patient's requirement for insulin, particularly when the patient presents with ketosis, is of importance to clinical treatment.⁷ Patients with IDDM require exogenous insulin administration to prevent the rapid onset of life-threatening complications. The most common life-threatening consequences

"Both patients . . . experienced a transient episode of profound alteration in glucose metabolism."

of withdrawal of exogenous insulin from patients with IDDM are hyperglycemia, ketosis and metabolic acidosis (diabetic ketoacidosis). Measurement of insulin levels or of the cleavage product of proinsulin, C-peptide, allows assessment of endogenous insulin production.⁸ Patients with IDDM are nearly always severely insulinopenic, as opposed to patients with NIDDM, in whom insulin levels range from low to elevated.⁹ Determination of insulin production may prove a useful biochemical marker in deciding diagnoses and directing therapy in that if sufficient endogenous insulin is present, additional, exogenously given, insulin may not be required on a long-term basis.¹⁰

Ketosis is associated with IDDM and is one of the cardinal criteria for the diagnosis. NIDDM encompasses a heterogeneous group of illnesses with a common link of elevation of blood glucose resulting from disturbances in glucose metabolism. A cardinal feature of NIDDM is that patients are not ketosis-prone.¹ If placed under stress, especially by an infection, selected patients with NIDDM may become ketotic. Generally, these patients are felt to have a more severe form of NIDDM and frequently require supplemental insulin.²

IDDM is felt to be a lifelong illness, requiring insulin therapy. NIDDM is usually also thought of as a lifelong illness, although the disease generally can be controlled by diet and weight loss.

When a previously undiagnosed diabetic patient presents in ketosis with evidence of acidosis it is difficult to argue against a diagnosis of IDDM. Features which argued against this diagnosis in the two patients presented included their ages and weights, although neither factor was sufficiently convincing to rule against IDDM as the appropriate diagnosis. Further evidence against IDDM was gained by the normal C-peptide levels obtained after initial treatment. C-peptide levels may be high, normal or elevated in NIDDM.¹¹ Patients with IDDM, on the other hand, are nearly always severely insulinopenic. The finding of nor-

mal C-peptide levels upon recovery from a decompensated state allowed prediction of a lack of requirement for insulin, arguing strongly against the diagnosis of IDDM.

Both patients presented have experienced a transient episode of profound alteration in glucose metabolism. Although both patients were asymptomatic at the last follow-up, and their laboratory parameters did not reveal significant signs of hyperglycemia, it seems prudent to consider both of them non-insulin-dependent diabetics rather than free of disease, in view of their past history of glucose intolerance.

In summary, new-onset diabetic patients presenting in ketosis and metabolic acidosis should not automatically be considered to be suffering from IDDM. Following stabilization and a short course of insulin, such patients may occasionally be found not to require insulin. The finding of a normal C-peptide, following stabilization from ketosis and metabolic acidosis, may be useful in predicting a lack of need for long-term insulin therapy.

REFERENCES

1. National Diabetes Data Group. Classification and Diagnosis of Diabetes Mellitus and Other Categories of Glucose Intolerance. *Diabetes* 28:1039-57, 1979.
2. Rendell M et al. Recovery from Decompensated Non-Insulin-Dependent Diabetes Mellitus: Studies of C-Peptide Secretion. *Diabetes Care* 4:354-59, 1981.
3. Block M, Mako M, Steiner D, Rubenstein A. Diabetic Ketoacidosis: Evidence for C-Peptide and Proinsulin Secretion Following Recovery. *J Clin Endocrinol Metab* 35:402-6, 1972.
4. Peck F, Kirtley W, Peck F. Complete Remission of Severe Diabetes. *Diabetes* 7:93-97, 1958.
5. Cheng T, Jahraus R, Traut E. Extreme Hyperglycemia and Severe Ketosis with Spontaneous Remission of Diabetes Mellitus. *JAMA* 152:1531-33, 1953.
6. Harwood R. Severe Diabetes With Remission: Report of a Case and Review of the Literature. *NEJM* 257:257, 1957.
7. Hother-Nielsen O, Faber O, Sorenson N, Beck-Nielsen H. Classification of Newly Diagnosed Diabetic Patients as Insulin-Requiring or Non-Insulin-Requiring Based on Clinical and Biochemical Variables. *Diabetes Care* 11:531-37, 1988.
8. Gjessing H, Samsgaard E, Matzen L, Froland A, Faber O. Reproducibility of Beta Cell Function Estimates in Non-Insulin-Dependent Diabetes Mellitus. *Diabetes Care* 10:558-62, 1987.
9. Damsgaard E, Faber O, Froland A, et al. Prevalence of Fasting Hyperglycemia and Known Non-Insulin-Dependent Diabetes Mellitus Classified by Plasma C-Peptide: Frederica Survey of Subjects 60-74 Yr Old. *Diabetes Care* 10:26-32, 1987.
10. Welborn T, Garcia-Webb P, Bonser A. Basal C-Peptide in the Discrimination of Type I from Type II Diabetes. *Diabetes Care* 4:616-19, 1981.
11. Ward W, Beard J, Halter J, Pfeifer M, Porte D. Pathophysiology of Insulin Secretion in Non-Insulin-Dependent Diabetes Mellitus. *Diabetes Care* 7:491-502, 1984.

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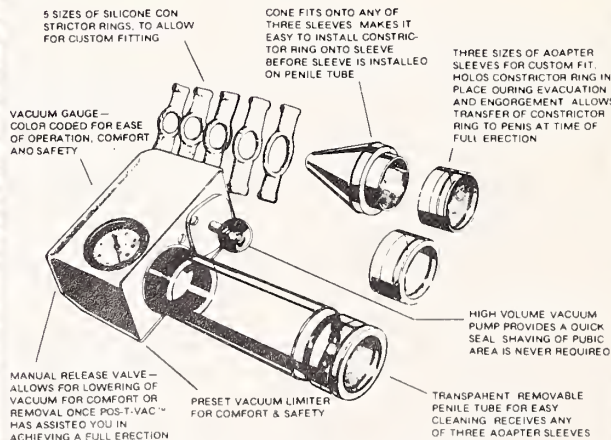
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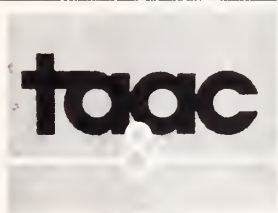
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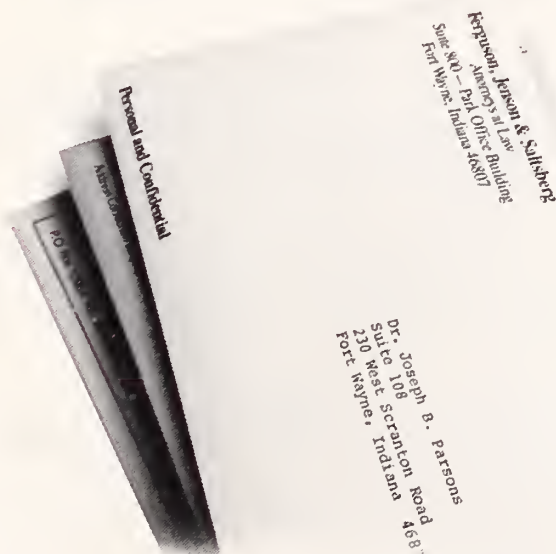
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Coronary Thrombolysis and Aging

DONALD L. VINE, M.D.,* *Wichita*

Many physicians have been reluctant to use thrombolytic agents for treating acute myocardial infarction in older patients. While this seemed appropriate when early smaller trials suggested an increased risk of stroke in the elderly, newer information strongly supports the benefits of early thrombolytic therapy for patients of all ages.

Three Trials

There are now three large, randomized trials which compare thrombolytic therapy to placebo for the treatment of patients of advanced as well as middle age. Two of these trials, the Italian (GISSI¹) and the international (ISIS-2²), compared streptokinase with placebo, while the Anglo-Scandinavian (ASSET³) trial used tissue plasminogen activator (rt-PA).

The age groups from each of the trials and number of patients treated are summarized in Table 1. Since the age divisions of the GISSI and ASSET trials (65 and 75 years) differ from those of the ISIS-2 trial (60 and 70 years), the classification of patients into *middle age*, *older* and *elderly* was determined by the age grouping chosen by each study's authors. The GISSI and ISIS-2 trials each contain an elderly group. The ASSET trial excluded patients over age 75.

Aspirin (ASA) was used with streptokinase (SK) in one of the ISIS-2 subgroups (ISIS-2 & ASA) but was not used routinely for patients in the GISSI, ASSET nor second ISIS-2 subgroup (ISIS-2 no ASA) trials.

Mortality

For each trial and each age group, the mortality at early follow-up was less for patients treated with streptokinase than for patients treated with placebo (Figure 1). The reduction in mortality for old and elderly patients was statistically significant for the ISIS-2 and ASSET trials, but not for the GISSI study.

The absolute reduction in mortality, determined by subtracting the mortality of treated pa-

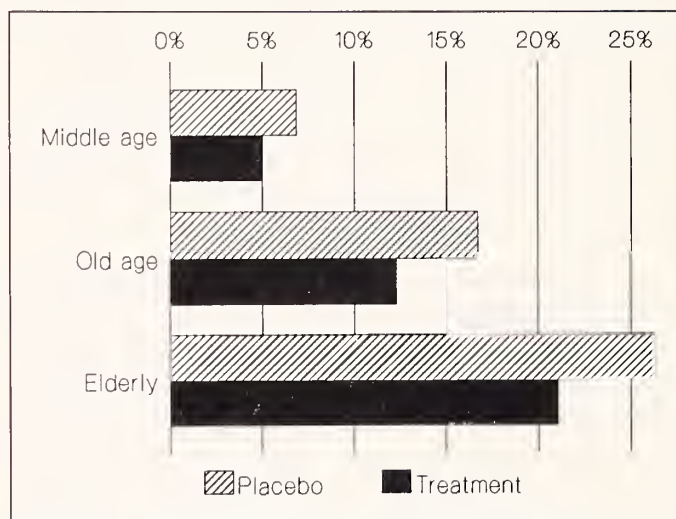


Figure 1. Combined mortality of three trials relative to ages of treatment and placebo patients.

tients from that of the control patients, increased with increasing age (Figure 2). Mortality in the ISIS-2 subgroup receiving aspirin, for instance, was reduced by 2.6% in patients less than age 60 and by 8.0% in patients over age 70.

When the results of these trials are averaged and the elderly patients treated with lytic therapy are compared to similar patients treated with placebo, there is a 5% reduction in death favoring treatment. This benefit is more than twice the 2% reduction in mortality reported for younger patients.

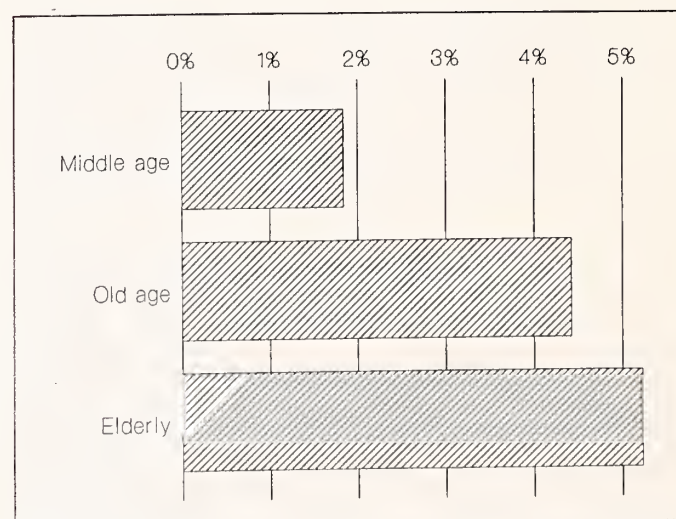


Figure 2. Absolute reduction in mortality of three trials relative to ages of treatment and placebo patients.

*Associate Professor, Department of Medicine, University of Kansas School of Medicine-Wichita

Address correspondence to Dr. Vine, Department of Medicine, UKSM-W, 1010 N. Kansas, Wichita, KS 67214.

TABLE 1
CORONARY THROMBOLYSIS AND AGING

Trial and Agent	Middle age		Older		Elderly	
	Ages	Number	Ages	Number	Ages	Number
GISSI ¹ SK	<65	3824	65-75	1444	>75	592
ISIS-2 ² SK no ASA	<60	1926	60-70	1533	>70	841
ISIS-2 ² SK & ASA	<60	1938	60-70	1500	>70	845
ASSET ³ tPA	<65	1711	65-75	827	>75	

Abbreviations: SK = streptokinase, no ASA = no aspirin, & ASA = with aspirin, tPA = tissue plasminogen activator

Stroke

If the reduction in mortality were offset by an increased incidence of stroke, then one might feel cautious about thrombolytic therapy for any age group. The data from five large studies were recently reviewed by Tiefenbrunn and Ludbrook, who found a 0.9% occurrence of stroke to occur regardless of whether the myocardial infarction was treated with thrombolytic agents or placebo.⁴ The type of stroke, embolic or hemorrhagic, may be related to the treatment, but the number of significant cerebrovascular events seems to be the same regardless of the therapeutic approach.³

Comments

More than 30,000 patients have been randomized to trials comparing intravenous lytic therapy to placebo for the treatment of acute myocardial in-

farction, and the results are consistent in demonstrating a favorable effect on early mortality. When the elderly are evaluated separately, there is no apparent basis for withholding similar treatment.

REFERENCES

1. Effectiveness of intravenous thrombolytic treatment in acute myocardial infarction. Gruppo Italiano per lo Studio della Streptochinasi nell'Infarto Miocardico (GISSI). *Lancet*, Feb 22, 1986;397-402.
2. Randomized trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2. ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. *Lancet*. Aug 13, 1988;349-60.
3. Trial of tissue plasminogen activator for mortality reduction in acute myocardial infarction. Anglo-Scandinavian Study of Early Thrombolysis (ASSET). Wilcox RG; von der Lippe G; Olsson CG; Jensen G; Skene AM; Hampton JR. *Lancet*, Sep 3, 1988;525-30.
4. Coronary thrombolysis — it's worth the risk. Tiefenbrunn AJ; Ludbrook PA. *JAMA*, Apr 14, 1989;2107-8.

MEDICINA ET LEX

(Continued from page 30.)

bility may result.

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As a good business practice, the identification of those accounts which need to be referred to a collection agency will yield better results if made as early as possible. It is well recognized that collection efforts are more successful if they can be made while the obligation is fresh in the mind of the debtor. Office policies should be adopted to prescribe approved conduct by the front office and identify the types of accounts which should be referred to collection agencies or attorneys.

DELEGATES' REPORTS

(Continued from page 36.)

nancial communication as previously directed by the House.

Noting that Dr. Sammons had previously planned to retire from his position as Executive Vice President and leave the employment of the AMA on March 31, 1991, when his current contract expires, the Board accepted his decision. To assure an orderly transition in administrative leadership, a search process will immediately begin to identify a successor for the position of AMA Executive Vice President.

The Board will continue the development and refinement of these policies and will report the findings of its continuing investigation and its further actions to the House at the 1990 Annual Meeting. At the conclusion of the investigation, the Board will provide a full accounting to the House of Delegates.



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Contraindications: VASOTEC® (Enalapril Maleate, MSD) is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Warnings: **Angioedema.** Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Patients with heart failure given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed, caution should be observed when initiating therapy. (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in patients with heart failure), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, Drug Interactions and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with severe renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: **General:** **Impaired Renal Function:** As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (>5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See Drug Interactions.)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness, especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension. Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors. A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Pregnancy—Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters. There are no adequate and well-controlled studies of enalapril in pregnant women. However, data are available that

show enalapril crosses the human placenta. Because the risk of fetal toxicity with the use of ACE inhibitors has not been clearly defined, VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Postmarketing experience with all ACE inhibitors thus far suggests the following with regard to pregnancy outcome. Inadvertent exposure limited to the first trimester of pregnancy has not been reported to affect fetal outcome adversely. Fetal exposure during the second and third trimesters of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported, presumably representing decreased renal function in the fetus. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors, but it is not clear whether they are related to ACE inhibition, maternal hypertension, or the underlying prematurity.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of ¹⁴C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

HYPERTENSION: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

HEART FAILURE: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Cardiac arrest, myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, Hypotension); cardiac arrest, pulmonary embolism and infarction, rhythm disturbances; atrial fibrillation; palpitation.

Digestive: Ileus, pancreatitis, hepatitis or cholestatic jaundice, melena, anorexia, dyspepsia, constipation, glossitis, stomatitis.

Musculoskeletal: Muscle cramps.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION).

Respiratory: Bronchospasm, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection.

Skin: Herpes zoster, urticaria, pruritus, alopecia, flushing, hyperhidrosis.

Special Senses: Blurred vision, taste alteration, tinnitus.

A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgia/arthritis, myalgias, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitivity, rash, and other dermatologic manifestations.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g% and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown): In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported. A few cases of hemolysis have been reported in patients with G6PD deficiency.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: **Hypertension:** In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance > 30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤ 30 mL/min (serum creatinine ≥ 3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, Pharmacodynamics and Clinical Effects.) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Patients with Heart Failure and Renal Impairment or Hyponatremia: In patients with heart failure who have hyponatremia (serum sodium < 130 mEq/L) and with serum creatinine > 1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, Heart Failure, WARNINGS, and PRECAUTIONS, Drug Interactions.) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

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Special Report: AIDS



KANSAS MEDICINE

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KMS Newsletter

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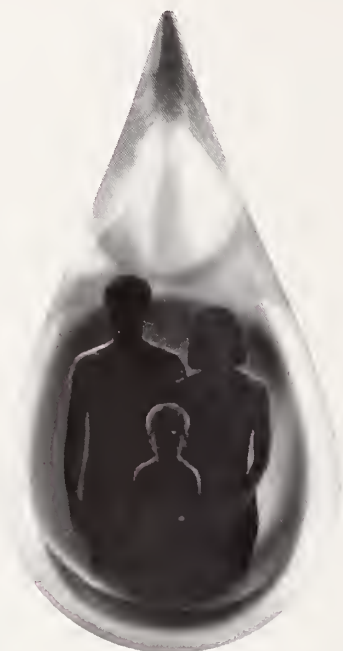
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ABOUT OUR LOGO

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

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It seems particularly fitting that Jim Hamil's painting of the Strawberry Hill section of Kansas City is dominated by a church, because the Church (this time with a capital C) was one of the important factors in the neighborhood's growth.

As the name suggests, Strawberry Hill in its early days *did* have wild strawberries growing on its slopes overlooking the Kaw and Missouri rivers. Its earliest known inhabitants were Delaware Indians who were relocated to Kansas as a result of the government's Indian Removal Policy of 1830. The Delawares did not like this land, however, and they soon sold it to the Wyandots, who were less troubled by the encroachments of white settlers than the Delawares. In fact, the Wyandots, many of whom had intermarried with whites, actually turned down land in western Kansas in favor of the Delawares' land across the river from the white settlement. But ironically, the Wyandots' Strawberry Hill sojourn was to be a short one. After Kansas became a territory in 1854, they were forced to surrender their reservation, and the land was allotted to a few tribal members deemed "responsible," which apparently meant "willing to sell land to whites."

One Wyandot who did not leave was Mathias Splitlog, the owner (appropriately) of a profitable sawmill. A successful businessman, Splitlog received most of the land that is now Strawberry Hill and built himself a brick home, still standing opposite Holy Family Church (the church in our cover painting). In 1865, Splitlog sold three acres of his land, on which was built St. Mary's Church, the first of four Catholic parishes that would be established in the neighborhood by 1887.

The reason for all these parishes was immigrants, and by the same token, the immigrants were attracted to Strawberry Hill by the presence of the Church. They were also interested in owning homes, and land in Strawberry Hill was more affordable than on the other side of the river. By 1870, employment at the railroad and the first stockyard, on the river bottoms, provided additional incentives.

As the Catholic population increased, so did the number of parishes, which began to cater to

particular ethnic groups. St. Mary's was the Irish parish, St. Bridget's was mixed, St. Anthony's was German and St. Joseph's was Polish.

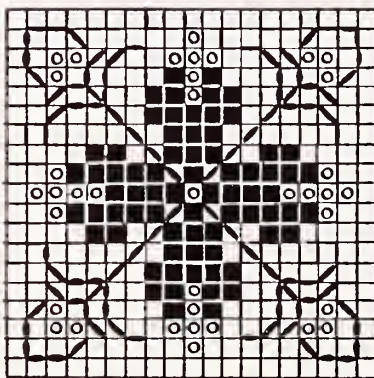
In the late nineteenth century, the meat packing industry grew rapidly. By 1890, there were five major plants located in the west bottoms, a flat plain east of Strawberry Hill. By 1925, there were nine plants, employing more than 10,000 workers. The rapid growth of this industry demanded more workers than were available in the Kansas City area at that time, and this urgent need for more employees brought a new group of immigrants, who would have a profound effect on the neighborhood. These new arrivals were Slavs, composed of Croats, Slovenes and Serbs who had only recently come to America. At first they settled near their workplaces, but as their numbers grew they began to build and occupy houses farther and farther west — and the Swedish, Irish and German families began to move out. Strawberry Hill was becoming a Slavic community.

Naturally, the Slavic population wanted their own churches, and by 1917 they had built four: St. John the Baptist (Croatian); Holy Family (Slovenian); St. George's Orthodox (Serb); and Holy Trinity Orthodox (Serb).

Many small, single-family dwellings and Slavic businesses appeared. There were six social clubs and auxiliaries, several schools and a slow but continuous influx of immigrants from the old countries to keep ethnic traditions alive.

In the 1940s the Slavic residency in Strawberry Hill reached its apex. Postwar planning and zoning changes, the incursion of a highway in 1957 and growing pressures from other ethnic neighborhoods nearby have caused many families to move away. The Slavic presence in Strawberry Hill is still strong, though the population is aging.

What will bring the next wave of settlers to Strawberry Hill? Some demographers predict gentrification, the purchase and renovation of property in older, working-class neighborhoods by higher-income groups. Whoever the next occupants are, they will find snug homes with well-groomed gardens, and plenty of places to worship. S.M.W.





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An Emerging Light

It has passed over the cultural, geographic, political and religious borders, though, in fact, what disease has not? It has produced a climate of fear and anger, and we are tempted to ask, what disease has not? But this has been different, in part because of the lifestyle of those first identified as its victims, but more because of the fear and uncertainties accompanying its spread in other directions. It became a matter not only of religious or social condemnation of that lifestyle but an even worse threat: it could happen to anyone.



So AIDS emerged upon us after a near century of almost unrelenting success against infectious diseases, bringing with it the revulsion of its very nature, the loss of that fundamental protective coat which, antibiotics or other therapies aside, we had unconsciously depended upon to give that final innate protection. Compassion and a little knowledge about it brought a small relief from that insecurity but it was a mixed comfort, coming as it did as a result of the transmission to a broader population and the innate human hope of eventual victory. The profession has increasingly moved to an attitude of encouraging caution, while the public retains its spectrum of feelings — from the eternal hope of victory to a strident, even militant, demand for more and faster results.

Expressed in these activities, both professional and public, there is still a sense of frustration against this medical insult. As with every example of public necessity, the most common battle cry is that the government should devote more time and money to the matter, an expression of that human conviction that money will solve every problem. And, of course, any amount of money made available would undoubtedly be utilized by someone in some direction. The implication, however, is that we should know more, the word should be disseminated more quickly, patients should receive the benefits more efficiently and effectively, and our failure to accomplish this series of miracles constitutes at least covert discrimination against its victims.

But this attitude, aided and abetted by the me-

dia because it makes more compelling copy, discounts the real progress that has been made. It has, for example, been reported with some authority that we know all we need to know about the virus itself. A point of encouragement: it is more vulnerable than might be the case, broadening the prospects for containment. But for the impatient, a question arises: if this is true, why can we not cure individually — and eliminate publicly — this scourge?

Another point that should be given broader and more emphatic attention is the fact that AIDS has been shown not to be as easy to transmit as was first feared. As the more explicable forms of transmission emerged, there was uncertainty about the degree of contagion (and the rubber glove market zoomed). Even though the behavior of the virus has been painfully exposed as the effort has progressed, it has been apparent that the virus (outside the protection of the human body) is much more vulnerable than first thought — otherwise, for one thing, we would have far more than the 117,781 cases now confronting us.

Though AZT has not attacked the disease with the speed and efficiency of antibacterial agents in their field, AZT is being shown to be more effective in improving and extending the quality of life for whatever time remains. Moreover, lesser dosages have been found to be effective, reducing the cost of treatment and allowing the present output to be extended to more patients. Zidovudine and other agents have shown promise *in vitro* and increasingly *in vivo*.

Obviously, the slow rate of progress in meeting public expectations has sustained some state of discouragement but two significant changes, hard to measure in effect but essential in real progress, are developing: First, these efforts have led to increasing evidence that the disease, contrary to earlier fears and experience, is not invariably fatal. But more certain and equally encouraging in effect is the evidence that physicians are showing less inclination to separate themselves from such patients. If these positive effects can help to bring the profession unanimously to the effort, it will be one of the most effective weapons of all. D.E.G.

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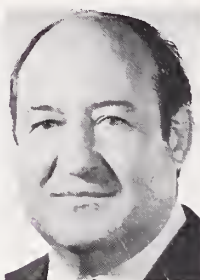
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Acquired Immune Deficiency Syndrome

I first heard of AIDS in the mid-1960s from a medical missionary who had served in Africa. As yet nameless and rarely encountered, the syndrome was associated with Kaposi's sarcoma and an inability to ward off infection. Although the basic disease was assumed to be infectious, no infectious agent had been discovered. My informant was apprehensive because the disease was incurable, and because he felt that it might spread beyond Africa.



The human T-cell lymphotropic virus (HTLV) is known from retrospective serum analysis to have been present since at least that time in Africa. A generation of Africans received blood to treat the profound anemia induced by parasitic infections — and a larger and ever-larger fraction of the transfused blood contained the HTLV-III virus. The spread of AIDS in Africa quite naturally, then, was inclusive of, but by no means confined to, homosexuals and IV drug users.

One person brought the virus to the United States. He was homosexual. The AIDS epidemic first became manifest among U.S. homosexuals — then IV drug abusers and prostitutes. Our nation, either consciously or by default, made the mistake of acting as if AIDS was some type of moral revenge for misbehavior. The spread of AIDS among heterosexuals, health care personnel and those who received unscreened blood transfusions has finally forced the perspective which should have guided our actions all along: 1) that this is an infectious disease affecting human beings; 2) that regardless of whether the disease is curable, treatable or preventable according to current knowledge, it should be approached using well established epidemiologic methods consistent with other similarly transmitted diseases; 3) that the constitutional rights of persons with AIDS should have the full protection of the law; 4) that physicians should treat AIDS patients with compassion and due care for the protection of both the afflicted and the health care team; and 5) that we as physicians can serve our patients best when we

"Our nation . . . made the mistake of acting as if AIDS was some type of moral revenge for misbehavior."

use current scientific knowledge and apply it non-judgmentally.

Since the AIDS retrovirus is "diabolically" designed to cripple the immune mechanism, the achievement of a vaccine by conventional means is out of the question, and indeed we remain distressingly far from a cure, AZT notwithstanding. So we are back to fundamentals. Probably the answer to this epidemic will come from a combination of well funded research, sound epidemiology (unfettered by paranoia, persecution or prejudice) and a compassionate medical profession.

Roger D. Warren, M.D.

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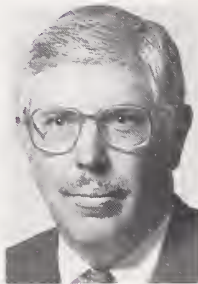
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Seropositive Patients

WAYNE T. STRATTON, J.D.,* *Topeka*

Traditionally, physicians have been free to accept or reject patients as the physician sees fit, subject to possible liability for abandonment. (See October 1988 KANSAS MEDICINE, page 250.) There is nothing in the present case law in Kansas which would indicate that this doctrine has been modified, although there are areas of the law left unsettled.



Anti-discrimination laws may impose an obligation to treat AIDS/HIV patients. In New York, it has been determined that physician and dentist offices are places of public accommodation, so that refusal to treat AIDS/HIV patients in those offices violates the local human rights law. Apparently, the New York City Commission on Human Rights is aggressively filing charges against dentists in that city who are refusing AIDS patients.

It is possible that a similar position may be taken under the Kansas Act Against Discrimination. The Kansas statute states it is unlawful "for any person . . . of any public accommodation to refuse, deny or make a distinction, directly or indirectly, in offering its goods, services, facilities and accommodations to any person as covered by this Act." Public accommodations are defined as those which cater or offer goods, services, facilities and accommodations to the public.

The Act protects those with a physical handicap. While the Kansas courts have not determined if AIDS is a physical handicap, courts in other jurisdictions have ruled the condition is a "handicap."

The AMA's Council on Ethical and Judicial Affairs issued a report entitled *Ethical Issues In-*

involved in the Growing AIDS Crisis. The council pointed out that the tradition of the American Medical Association, since its organization in 1847, is that: "When an epidemic prevails, a physician must continue his labors without regard to the risk of his own health."

Q: *Is a physician obligated to treat an AIDS patient?*

Regarding the right of a physician to choose his patient, the council concluded that this principle does not support illegal or invidious discrimination. Categorical discrimination against a patient based solely on his or her seropositivity should not be permitted. A physician who is not able to provide the services required by persons with AIDS should make an appropriate referral to those physicians or facilities that are equipped to provide such services. The report concluded: "A physician may not ethically refuse to treat a patient whose condition is within the physician's current realm of competence solely because the patient is seropositive."

The AMA's Council on Ethical and Judicial Affairs' position is an advisory opinion upon the ethical obligations of physicians. The legal obligation is not as clear. It is possible that the Kansas Administrative Agency or Court will rule that the Kansas Act against Discrimination applies in this situation; however, a decision has not been reached at this time.

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

Next month in "Medicina et Lex":

Implications of the National Practitioner Data Bank: What Will It Mean to You?

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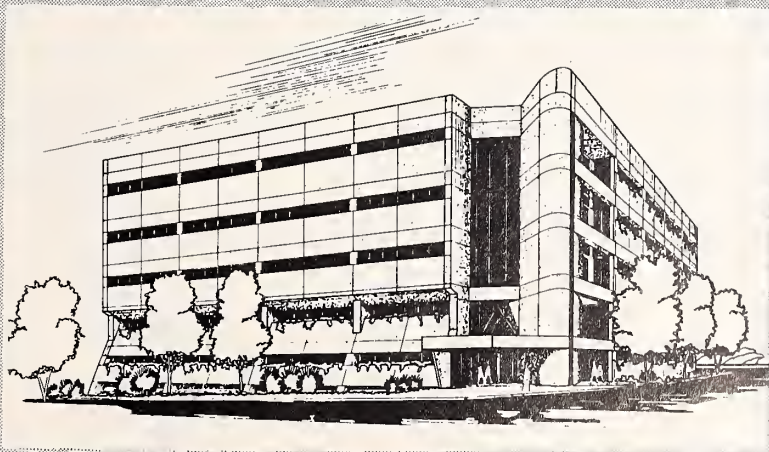
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President's Message

Dear Physician:

Since 1933 Doctors' Day has been observed annually on March 30. Eudora Brown Almond of Georgia was the founder of Doctors' Day. Her inspiration came from sharing her husband's dedication to the practice of medicine. Mrs. Almond was convinced that medicine was the greatest profession on earth, and doctors, the greatest heroes. This respect and admiration inspired her to propose to her local auxiliary the idea of having a day on which to honor the practitioners of the medical arts.

March 30 was selected, as it was on March 30, 1842 that another Georgian, Dr. Crawford W. Long, first used ether anesthesia in surgery.

Over a half century since the first Doctors' Day celebration, we still find it fitting and proper to

honor you as we recognize your contributions to the health and welfare of all Kansans. Governor Mike Hayden has signed an official Doctors' Day Proclamation (reproduced below) calling on the people of Kansas to express their appreciation to you for being guardians of the nation's health. We in the auxiliary especially salute you and thank you for your work and dedication.

Sincerely,



Joan S. Tempero
KMSA President

STATE OF KANSAS

PROCLAMATION BY THE GOVERNOR

TO THE PEOPLE OF KANSAS, GREETINGS:

WHEREAS, since the days of Hippocrates, there have been men and women practicing medicine to heal the sick and afflicted among us; and

WHEREAS, in the performance of duty they have demonstrated the highest skill and professional achievement, in order to improve the quality of life for us all; and

WHEREAS, these physicians have not only devoted themselves to medicine, but are active community and civic leaders as well; and

WHEREAS, the Kansas Medical Society Auxiliary has found it fitting and proper to honor these men and women in recognition of the contribution made by them, to the health and well-being of residents of the State of Kansas and the nation:

NOW, THEREFORE, I, MIKE HAYDEN, GOVERNOR OF THE STATE OF KANSAS, do hereby proclaim March 30, 1990, as

DOCTORS' DAY

in Kansas and do call upon all citizens of Kansas to express their appreciation to these guardians of the nation's health.

DONE At the Capitol in Topeka
Under the Great Seal of
the State this 22nd day
of February, A.D., 1990.

BY THE GOVERNOR: Mike Hayden

Bill Graves
Secretary of State



Governor Mike Hayden signs the official Doctors' Day Proclamation. Left to right: Li-Ying Lee, KMSA President Elect; Joan Tempero, KMSA President; Governor Hayden; Nancy Macy, KMSA First Vice President; and Secretary of State Bill Graves.

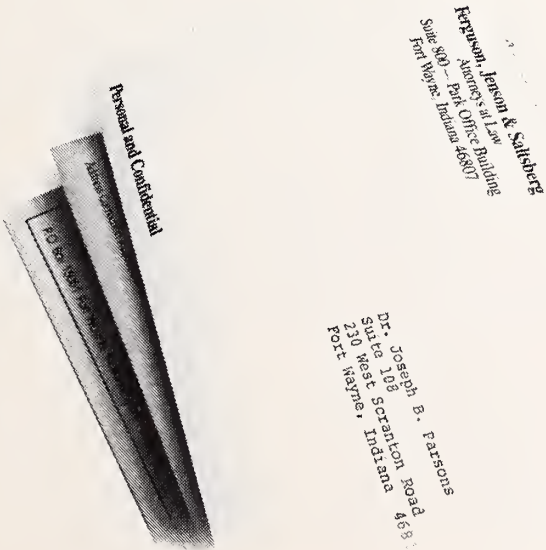
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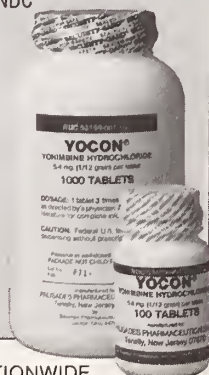
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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1990 AIDS Legislation

CHIP WHEELLEN, M.P.A.,* *Topeka*

The 1990 Legislature will again address questions pertaining to whether or not physicians should be required to report cases of HIV positivity. During previous legislative sessions, there have been a number of proposals that would have required physicians to report by name individuals who test positive for HIV. This year, by contrast, both the Kansas Department of Health and Environment and two individual legislators requested bills which would require reporting of HIV positivity *excluding* the name of the patient. The rationale for such proposals is based upon the epidemiologic value of gathering data and compiling statistics pertaining to the number and characteristics of patients who test positive for HIV.

KMS member Dr. Charles Konigsberg, the State Director of Health, advised KMS that the Department of Health and Environment would request legislation to require collection of demographic information pertaining to cases of HIV positivity. As a result of Dr. Konigsberg's information, the KMS Medical Services Committee discussed extensively whether or not such data and statistics would have epidemiologic value. It was concluded that the KMS should support such legislation. In addition, the Medical Services Committee agreed that the ability of physicians to inform persons who may be exposed to HIV should be expanded.

As a result of the deliberations of the Medical Services Committee, KMS recommended amendments to 1990 Senate Bill 529 which will allow physicians to inform emergency personnel, as well as other health care providers, if such individuals may have been or may be exposed to the bodily fluids of a person who is known to be HIV positive. Another amendment recommended by KMS allows a physician to inform an unsuspecting spouse or other partner who may have been ex-

(Continued on page 78.)

* Chip Wheelen is the Kansas Medical Society's Director of Public Affairs.

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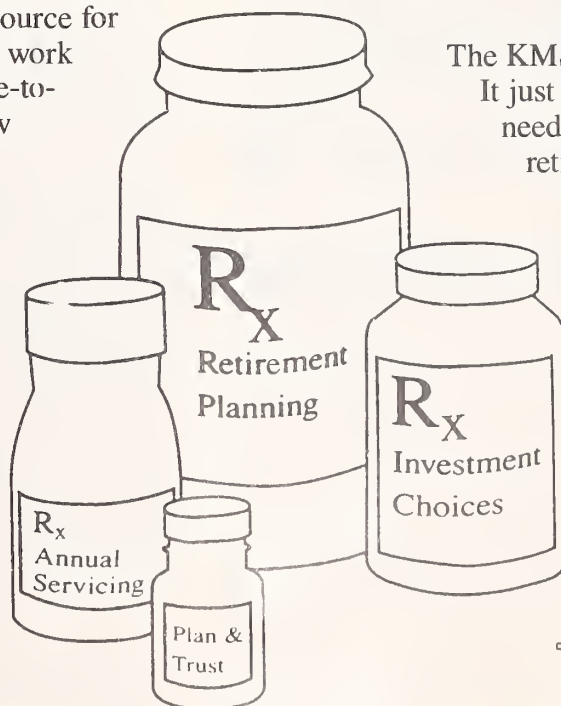
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AIDS and HIV: A National and State Perspective

CHARLES KONIGSBERG, JR., M.D., M.P.H.,* *Topeka*

In an era of modern medical miracles, and after decades of public health successes, including the eradication of the dreaded scourge of smallpox, acquired immune deficiency syndrome (AIDS) now poses some immense challenges to the medical and public health systems. In less than a decade, the devastation wrought by the human immune virus (HIV) has challenged us as no other disease has, at least since poliomyelitis.

As of February 1, 1990, 117,781 cases of AIDS have been reported in the United States. As of the same date, Kansas has reported 325 cases, since record-keeping began in 1981. Kansas is considered to be a "low-incidence" state. The majority of Kansas cases have been reported in Johnson, Wyandotte, Sedgwick, Shawnee and Leavenworth counties. But it should be noted that the metropolitan Kansas City area, including both states, would not be considered low incidence, with 743 cases reported as of February 1, 1990.¹ Reliable data on the prevalence of HIV infection in Kansas are not currently available, but extrapolations by the New Jersey Department of Health have estimated the prevalence of HIV infection in Kansas to be between 2,503 and 3,755.²

The U.S. Public Health Service (PHS) has estimated that the cumulative total of AIDS cases at the beginning of 1991 will range from 155,000 to 220,000, and that at least 96,000 patients will be alive at some time during that year. It is also estimated that approximately 1,500,000 persons are currently infected with the HIV virus.³ While newer estimates of infections and AIDS cases are somewhat lower, nevertheless it is clear that this disease is having and will continue to have a major impact on our population and on our health care system.

Changing Perceptions of HIV Disease

The public and perhaps many health care profes-

"Increasingly, AIDS is viewed as the terminal stage of HIV illness."

sionals still view AIDS as a fatal disease not particularly amenable to therapy. But increasingly, AIDS is viewed as the terminal stage of HIV illness. The development of AIDS occurs many years after infection, with manifestations of immune system compromise long before the terminal stage. Unfortunately, it appears that the ultimate risk of developing AIDS is very great. In short, HIV is lending itself to the *chronic disease* model.

The focus is more and more on the infection prior to the specific manifestations which are officially reported as AIDS. The findings that pneumocystis carinii pneumonia (PCP) can be managed prophylactically and that progression of HIV disease may be slowed by the use of lower doses of zidovudine (AZT) are profound new aspects of our understanding and perception of HIV infection.

While the homosexual population will continue to be affected, AIDS is becoming more of a problem for minorities, women and children.

Community Response to AIDS and HIV

Clearly, the nation and the state of Kansas need an organized and comprehensive response to the AIDS and HIV epidemic. The Association of State and Territorial Health Officials (ASTHO) has identified four major goals for controlling HIV infection in the community. These are:

- Reduction of HIV transmission
- Mobilization of support constituencies within the community
- Education of high-risk groups and the general public
- Provision of care for persons with AIDS and HIV infection.

*Director of Health, Kansas Department of Health and Environment.

Address correspondence and reprint requests to Dr. Konigsberg at 900 SW Jackson, Room 1052, Topeka, Kansas 66612-1290.

"AIDS is becoming more of a problem for minorities, women and children."

Ten essential elements were identified that constituted the framework for a public health response to address AIDS, including surveillance for HIV infection, targeted educational efforts, education of the public, community mobilization, provision of care, planning and evaluation, HIV antibody testing and counseling, contact notification, laboratory capabilities and education and training of health professionals.⁴

An organized and comprehensive response is critical to dealing with the AIDS epidemic. Public health, in cooperation with health care providers and support and advocacy groups, can and should play a key leadership role in organizing the community response to AIDS.

Prevention

Public health's first and foremost responsibility is prevention. Most of the efforts have focused on primary prevention — keeping people from getting infected. However, there is now an increased interest in early intervention with infected persons. Bringing infected persons who do not have AIDS into a case-managed system of care and into the private sector offers the opportunity to counsel on the risks to others, offer partner notification and to provide early medical interventions that may slow the progression to symptomatic disease. Secondary prevention, the prevention of complications, becomes a part of the prevention strategy that now offers something to the individual as well as to society.

It is essential that public health officials know the size and characteristics of the HIV epidemic if good, rational program planning is to be performed. Seroprevalence studies are being conducted in various locations in the nation, but will not provide much information of use here in Kansas. In an effort to gain better data on HIV seroprevalence, the Kansas Department of Health and Environment (KDHE) has asked the Legislature to pass a bill which would mandate reporting of confirmed HIV positives, without names, from physicians and laboratories. While this would provide useful epidemiological data, reporting by names may eventually be necessary

to facilitate case management and partner notification.

It is important to remember that AIDS and HIV are public health problems. A comprehensive prevention strategy includes targeted education of those at risk, case finding, voluntary partner notification, early medical intervention and access to drug abuse treatment. All of this must be done with strict diligence to confidentiality and anti-discrimination.

Health Care Delivery

AIDS has added a new burden to our nation's health care system, at a time when the system is already strained. Testimony given to the new National Commission on AIDS has dramatically outlined the disaster-like aspects of providing care for persons with AIDS in New York City, Los Angeles and other major cities.⁵ While Kansas may seem protected from such huge caseloads, it is important to realize that as the current population of HIV-infected persons becomes symptomatic, we can expect an ever-growing burden of patients without the means to pay or in need of a support system which does not currently exist. Kansas does not have the well organized public sector systems of health care that many other areas of the nation have. A recent report by the Commission on Medically Indigent and Homeless, created by the Kansas Legislature, highlighted the various problems we have here in Kansas with respect to the medically underserved.⁶

The costs of caring for AIDS- and HIV-infected persons are significant. The length of survival for AIDS patients is increasing. An estimate of the lifetime costs for a 15-month survival is \$83,181.⁷ It is estimated that the annual cost for direct services to a single patient with a CD4 cell count under 200 is \$4,277.⁸ This figure does not include the cost of zidovudine (AZT), which would add another \$3,000 or \$4,000 annually.

I am concerned about the role of physicians in the coming years. In many areas, infectious disease specialists and a few other physicians with a special interest take care of the majority of AIDS and HIV patients. Many practices are overloaded

"It is important to remember that AIDS and HIV are public health problems."

and are having to restrict the entry of new patients with HIV disease. Increasingly, there will be a need to mainstream the evaluation, diagnosis and management of HIV disease. Internists, family physicians, pediatricians and other primary care physicians will need to be familiar with the latest tests and know when to refer and how to manage some of the manifestations of HIV disease.

In Kansas, as has been demonstrated in other states, it will be necessary to develop out-of-hospital and case-managed systems of care linking both the public and private sectors. Francis and others in California have demonstrated the value of early intervention as a medical and public health strategy.⁹ The Robert Wood Johnson Foundation and the federal Health Resources and Services Administration have funded successful case-managed systems in various locations, including the author's previous location in Ft. Lauderdale, Florida.¹⁰

National Commission

The National Commission on Acquired Immune Deficiency Syndrome was created by an act of Congress to serve as the successor to the Presidential Commission on the Human Immune Deficiency Virus Epidemic, which published its final report in June 1988. Congressman Roy Rowland of Georgia, a physician, developed the idea in Congress, and serves as a member. Congress is seeking guidance regarding the AIDS epidemic. The general purpose of the Commission is to promote the development of a national consensus on policy concerning AIDS. The Commission is to deal specifically with health care, information and education, behavioral changes needed, civil rights, federal policy-making capacities and international aspects. The membership consists of 15 members, 10 appointed by the leadership of the Senate and House and 5 by the President. Five physicians, including the author, who was appointed by Senator Bob Dole, serve on the Commission.

Conclusions

It is clear that the spectrum of HIV infection is much broader than the terminal phase known as AIDS. The health care and public health systems will have to view and manage HIV as a chronic disease. Early intervention will not only facilitate public health and preventive measures, but provide a therapeutic advantage to the patient as well. Mainstreaming medical care using primary care

(Continued on page 78.)

Information for Authors

Manuscripts must be typewritten, double-spaced, leaving wide margins. The original plus one copy should be submitted. Manuscripts are received with the explicit understanding that they are not simultaneously under consideration by any other publication. Publication elsewhere may be subsequently authorized at the discretion of the editor.

Brief, concise **articles** are preferred; an ideal manuscript will not exceed five double-spaced pages. All material will be edited by the editorial staff to assure clarity, good grammar and appropriate language, and to conform to KANSAS MEDICINE style and format. When feasible, material may be condensed.

The author will be asked to review the **galley proof** prior to publication. Although editing and proofreading will be done with care, the author is responsible for accuracy of material published. The galley proof is for correction of **ERRORS**; rewriting of material *must* be done prior to submission. Authors are urged to check manuscripts and galley proof carefully for errors that could result in inaccurate information.

Drugs should be referred to by generic names; trade names may follow in parentheses if useful. All **units of measure** must be given in the metric system.

KANSAS MEDICINE will print a maximum of **ten references**. All references should be keyed with superscripts in the text in the order cited. If more than ten sources are cited, readers will be referred to the author for the complete list.

Illustrative material must be identified by its referral number in the text and be accompanied by a short legend. **Photos** should be black-and-white glossy prints. **Tables** should be self-explanatory and should supplement, not duplicate, the text.

KANSAS MEDICINE will assume the cost of black-and-white figures and tables for two units. A unit is defined as 1/4 page. The author(s) will be billed for additional units at cost.

A **reprint** order form with a table showing estimated cost will be sent with the galley proof. Reprints must be ordered by the author through KANSAS MEDICINE, and will be billed to the author following shipment.

KDHE's Response to AIDS

DEBORAH TAYLOR,* *Topeka*

The first article on acquired immunodeficiency syndrome (AIDS), although AIDS did not yet have a name, was published in the Centers for Disease Control's *Morbidity and Mortality Weekly Report*. It revealed that five cases of *Pneumocystis carinii* pneumonia (PCP) had been found in young to middle-aged homosexual men in Los Angeles. That was June 1981. In July 1982, the first three cases of AIDS or PCP were diagnosed among persons with hemophilia. In January 1983, two cases of PCP among female sex partners of men with AIDS were reported. These were the first reported cases of heterosexual transmission in the world. A week later the first case of transfusion-associated AIDS was reported. In 1985 a test was licensed to detect antibody to human immunodeficiency virus (HIV) and was used to screen all donated blood and plasma in the United States. Each year something new has been discovered that affects the planning and direction of AIDS/HIV efforts.

Since 1981 AIDS/HIV-related programs have needed to remain flexible to meet the frequent changes of course and new developments that the epidemic presents to program services and budgets.

Kansas Department of Health and Environment (KDHE) Bureau of Disease Control began its official AIDS Program in 1985 with the development of HIV counseling and test site availability. Now the program extends throughout the Department of Health and Environment with the coordination and management of all AIDS/HIV projects and budgets stemming from the Bureau of Disease Control, AIDS Section, but extending into the Office of Health and Environmental Education, Health and Environmental Laboratory, and Fiscal Services, Aid to Local Counties.

Kansas Department of Health and Environment provides HIV testing at 16 private sites, including drug treatment centers and correctional

facilities, as well as 52 public sites. Of the 52 public counseling and testing sites, 39 offer anonymous testing, 6 offer confidential testing, and 7 offer either anonymous or confidential testing. As of January 1, 1990 KDHE has performed a total of 26,036 HIV tests since testing began in the summer of 1985. This has resulted in 515 positive tests, for a total positivity rate of 2.0%.

All counseling and testing site counselors who work under KDHE direction must be trained by KDHE staff and follow CDC and Association of State and Territorial Health Officials (ASTHO) guidelines. Since the summer of 1985 1,314 counselors have been trained or have received update training. Persons testing HIV positive are counseled concerning behavior modification that will reduce their risk of transmitting the infection to others, given referral information, and encouraged to notify their sex and/or needle-sharing partner or partners. If HIV-positive persons are not able to notify their partners, disease intervention specialists provide assisted partner notification services. Twenty-four-hour recorded information about HIV counseling and testing is available by calling 1-800-232-0040.

The focus and strategies of KDHE AIDS education efforts continue to change in response to shifting epidemiologic trends. Expanded intervention activities are targeted to populations experiencing the highest relative rates of infection. The AIDS education program is charged with developing programs that will identify and change, if necessary, attitudes, beliefs and behaviors concerning AIDS/HIV infection that will decrease transmission of HIV; decrease anxiety about HIV disease and misconceptions about transmission; provide technical support to community-based organizations and health departments to facilitate dissemination of successful educational messages and coordinate AIDS/HIV media campaigns. In 1989 KDHE funded and provided technical assistance to three AIDS service organizations, six community-based organizations, and 18 county health departments to provide AIDS education to their constituents.

The sheer scope of the ever-expanding program

*Director, AIDS Program, and Acting Director, Bureau of Disease Control, Kansas Department of Health and Environment.

Address correspondence and reprint requests to the author at 109 SW 9th, Suite 605, Topeka, Kansas 66612.



AIDS/HIV: NEW REPORTS

Two articles in the March 16 issue of JAMA offer new--and in some respects conflicting--perspectives on the future course of AIDS and HIV infection in the United States.

Researchers at USC published a report which states that "the AIDS epidemic in the United States crested in 1988. The incidence of new cases has started to decline and will continue downward to a still-to-be-determined but probably low endemic level before the year 2000."

But this relatively sanguine view is not shared by all who are studying the problem. In an accompanying editorial, two researchers from Maryland wrote: "Data from HIV seroprevalence surveys indicate that perhaps 1 million people have been infected in the United States. If this is so, and if a large fraction of those infected go on to develop clinical AIDS, as is consistent with available data on the AIDS incubation distribution, then the estimate of 200,000 cumulative cases [predicted by the USC researchers] will fall seriously short."

In another report in the same issue of JAMA, researchers from the AIDS Office of the Public Health Department, City and County of San Francisco, warn of the many pitfalls in predicting AIDS cases. They caution that such factors as the long incubation period of the disease, incidence of HIV in the population and the proportion of HIV-infected persons who develop AIDS make predictions difficult. Also, they observe, the course of the epidemic could be altered by future introductions of major new therapies or vaccines.

AIDS IN KANSAS

For a look at the current status of AIDS/HIV in Kansas, read the special report in the March issue of KANSAS MEDICINE.

AIDS NEWS FROM KDHE

HIV Counseling and Testing training courses will be offered in Hays in April. Introductory HIV/AIDS training will be offered on April 24 and 25, and an advanced course will be given on April 26. For details, call Av Mercer at 913-296-5590.

AIDS Drug Reimbursement Program: \$70,469 is available in 1990 for Kansans infected with HIV, for the procurement of AZT, aerosolized pentamidine and alpha-interferon. Call Harold Geer at 913-296-5590 for information.

SYPHILIS EPIDEMIC IN WYANDOTTE COUNTY

In 1989 more than 50 new cases of syphilis were reported in Wyandotte County. This represented an increase of more than 700% from 1988, and was greater than the total number of cases during the preceding six years. Unlike previous years,

in 1989 "virtually every case of syphilis was related directly or indirectly to individuals involved in crack cocaine, whether having sex for drugs or for money to buy drugs," according to Terry K. Brecheisen of the Wyandotte County Health Department.

These new circumstances have created several problems for the health department. The promiscuous, unreliable and drug-impaired status of this group of patients makes contact tracing difficult, if not impossible. Also, since syphilis has been relatively uncommon for the past decade, patients are not familiar with its symptoms. Lastly, many physicians have never seen a case of syphilis or are not accustomed to looking for it. The Wyandotte County Health Department is anxious to work closely with physicians in stopping this epidemic. For more information, call 913-321-4803.

ADVERTISING PROBLEMS?

KMS has heard reports of problems that have arisen as a result of a Yellow Pages advertising program initiated by the American Board of Medical Specialties (ABMS) in which physicians were required to pay to have their names included in a list of board-certified physicians. Problems have occurred when physicians were billed for advertising they did not want, or were excluded from ads.

If you have had any problems with this type of advertising program, please let KMS know. Call 1-800-332-0156 or 913-235-2383.

KMS COMMITTEE MEMBERS NEEDED

KMS President-Elect Joseph C. Meek, Jr., M.D., is encouraging members from all parts of the state to volunteer for KMS committees. Those who would like to find out more about committee activities should contact Val at 1-800-332-0156. Committees include:

Aging/Long-Term Care	Maternal Health
Constitution & Bylaws	Medical Services (Subcommittees
Continuing Medical Ed.	on AIDS, Indigent, Rural Health)
Drug Utiliz. Review	Medicare-FI Liaison
Emerg. Medical Services	Membership/Insurance
Health & Env. Liaison	Professional Liability
Hosp. Med. Staff Section	Professional Practices Review
Phys. Impairment/Advocacy	SRS (Medicaid) Liaison
Legislative	Young Physicians

MEDICAL DIRECTOR SOUGHT AT KFMC

The Kansas Foundation for Medical Care Inc. (KFMC) is accepting applications for the position of full-time Medical Director. This individual will be responsible for the medical peer review aspects of the organization, including the development and approval of professional review criteria, utilization and quality assurance protocols and the continuing education process. The Director also is responsible for the recruitment, training and availability of physician reviewers and committee members involved in KFMC review and consultant activity. This position will require travel, both in and out of state.

Applicants must have an M.D. or D.O. degree from an accredited medical school; be board certified in their specialty area; be licensed to practice medicine or surgery in Kansas, or capable of acquiring a Kansas license; have a minimum of five years' experience in the active practice of medicine, with experience in utilization review and/or quality assurance activity; possess good oral and written communication skills and have demonstrated leadership capabilities. The candidate must reside in or near Topeka, or be willing to relocate to that area, and be available to work on a full-time basis.

Interested individuals should submit a letter of application, curriculum vitae and salary requirements by July 1, 1990, to: The Executive Committee, The Kansas Foundation for Medical Care, 2947 SW Wanamaker Drive, Topeka, Kansas 66614.

POSITION AVAILABLE: AMA EXECUTIVE VP

The AMA Board of Trustees is accepting applications for the position of Executive Vice President of the American Medical Association. The board will also welcome suggestions for candidates. Candidates should be familiar with the AMA and with the health care field. They should have managerial experience and be facile with financial reports and documents. An M.D. is preferred. Send requests for applications, accompanied by a curriculum vitae and any other supporting information, to John J. Ring, M.D., Chairman, AMA Search Committee, 511 E. Hawley Street, Mundelein, IL 60060. Applications will be held in strictest confidence. They should be sent by registered mail, return receipt requested, to arrive by April 30.

FIVE KMS MEMBERS APPOINTED TO GOVERNOR'S COMMISSION

On February 9, Governor Mike Hayden announced the appointments of 48 individuals to the Governor's Commission on Health Care. The Commission is appointed by the Governor to study the mechanisms available to finance costs of health care and deliver recommendations to the Governor by December 1, 1990.

KMS members appointed to the Commission are F. Calvin Bigler, M.D., Garden City; D. Kay Clawson, M.D., Vice Chancellor-KUMC; M. Martin Halley, M.D., Topeka; William R. Roy, M.D., Topeka; and Kermit G. Wedel, M.D., Minneapolis. Jimmy Buller, D.O., of Parsons, was also appointed to the Commission, for a total of six physicians.

NO IMPROVEMENT IN INFANT MORTALITY DURING THE 80S

Progress in reducing the infant mortality rate slowed from 4.7% per year in the 1970s to 2.7% per year in the 1980s, according to a report released by the National Commission to Prevent Infant Mortality. The Commission attributed the unfavorable figures to smoking, use of alcohol and crack cocaine by pregnant women, infection with AIDS and syphilis, births to unmarried mothers and late or no prenatal care. There was no improvement in the 1980s in the percentage of low-birthweight infants under 5.5 pounds.

TALKING TO PATIENTS ABOUT ALCOHOL CAN HELP

Americans' per capita consumption of alcohol increased significantly between the 1960s and the 1980s, yet physicians spent less time talking to their patients about cutting down,

according to a recent study. The authors note that "many physicians feel pessimistic about the effectiveness of any efforts to change the course of problem drinking or alcoholism." Yet, the authors report, research shows that "even a single session on reduction of problem drinking in medical patients results in improvement for a significant proportion of patients."

SMOKERS LOSE--BUT CAN
REGAIN--THEIR SENSE
OF SMELL

A new study shows that smokers experience a loss in their ability to smell. Fortunately, the damage appears to be reversible, though improvement takes a long time.

A group of 553 men and 85 women were studied, using a test that included 40 odors. The researchers concluded that current smokers are nearly twice as likely to have a lessened sense of smell as those who have never smoked. For those who quit smoking, the longer they stop, the better their sense of smell returns. Still, it is a slow process; for example, two-pack-a-day smokers would have to quit for as many years as they had smoked to completely regain their sense of smell.

HAPPY BIRTHDAY,
DR. UHR!

KMS members are invited to attend a reception in observance of the 90th birthday of Dr. Nat Uhr, to be held on April 19 from 3:00 to 4:30 p.m. at the Menninger Dining Room (Thornlea Commons). If you are not able to attend, but would like to send birthday greetings, send them c/o Irving Sheffel, Menninger Foundation, Box 829, Topeka, Kansas 66601.

CALL FOR PRESENTATIONS
AT K-STATE

A conference entitled Rural Families: Legacies for the Future will be held September 26-28, 1990 at Kansas State University. Proposals for presentations at this conference are now being accepted. The deadline for proposals is April 16. For information, call 913-532-6984, 913-532-6953 or 800-432-8222.

TRIMMING SOME FAT
FROM THE GUINNESS BOOK
OF RECORDS

If you're thinking of buying a new edition of the Guinness Book of Records, you may be disappointed to learn that the gluttony section has been dropped. Forty-three astonishing listings involving the consumption of huge quantities of delicacies like eels, gherkins, prunes, sushi and snails have been eliminated now that the editors of the book have concluded that eating a whole ox in less than 42 days could make you sick, and because they perceive their readership as more health-conscious. (The ox-eating record was set by Johann Ketzler of Munich in 1880.) For the last several years, the book had run a warning that attempts to break gluttony records "must be regarded as extremely inadvisable."

But one stellar glutton has been retained for his "historical and nostalgic value": the greatest omnivore. He is not exactly the same type of omnivore you read about in your grade-school science text. Since 1966, Michel Lotito, of France, has eaten 10 bicycles, a supermarket cart, seven television sets, six chandeliers, a coffin and a Cessna light aircraft. (And probably a lot of Alka-Seltzer.)

"The next KANP meeting will be held April 19 ... in Wichita."

makes it difficult to prioritize areas most in need of attention. A strategic AIDS/HIV prevention and intervention plan has been drafted to address the need to prioritize and is being released this month.

The plan describes KDHE's present program and its planned response to coordinate with other Kansas professional associations, government agencies, local health departments, volunteer groups, AIDS service organizations and community-based organizations over the next three years. The topics outlined in the plan are:

- Surveillance for HIV infection/seroprevalence
- Education: targeted, public and professional
- Community mobilization
- HIV antibody testing and counseling/partner notification
- Care coordination program
- Planning and evaluation
- Special projects.

Strategic goals and objectives for the next three years are outlined within each major section. Flexibility has been built into the plan through the Special Projects Section so that Special Projects serves as the most flexible link that allows KDHE to move closer to the moving AIDS target. In addition to the existing program services that KDHE offers, plans include a five-year survey to measure the levels and trends of HIV in women bearing live children. The testing will be used to provide representative, unbiased estimates of HIV infection in childbearing women. Blood from all newborns is presently routinely collected for other health-related studies conducted in the Kansas Health and Environment Laboratory. The same specimen will be used for the HIV survey.

KDHE is working with a state university to develop campaign strategies to reach target audiences in Kansas with appropriate AIDS messages.

KDHE believes that community mobilization and coordination is important for an effective state program, and Kansas continues to involve more than 268 organizations and individuals in the bi-

monthly meetings of the Kansas AIDS Networking Project (KANP). The KANP function is to provide an exchange of information, ideas, and resources; to match needs with resources; to fill existing gaps; and to provide mutual support. The KANP has selected seven priority HIV/AIDS issues they plan to address during the next year. They are:

- Reaching minority populations with AIDS/HIV education
- Increasing teen awareness of the epidemic
- Identifying financial support systems for AIDS education
- Reaching the drug-using community
- Improving HIV support/services system
- Assuring behavior changes
- Improving access to medical insurance.

The next KANP meeting will be held April 19, 1990 in Wichita. The Sedgwick County Health Department is co-sponsoring the program with KDHE, and everyone interested in AIDS information is invited.

Strategic planning, program flexibility and community mobilization serve as the foundation for KDHE's response to AIDS.

A GLOBAL EXPERIENCE

As a parent of young men and women of high school age, your choice of an educational institution can be critical in determining the future they will have in what is fast becoming a "global village."

Maur Hill, and the Academy, two Catholic residential college prep schools operated by Benedictine monks and sisters of Atchison, can help develop your son or daughter into the adults you want them to be.

Young people need to prepare for being "global citizens" of tomorrow. Find out how Maur Hill and the Academy can help your son or daughter meet these challenges. Call or write today:

Director of Admissions

**Maur Hill
Prep School**
(913) 367-5482

**Academy of Mount
St. Scholastica**
(913) 367-1334
Atchison, Kansas 66002

AIDS Knowledge, Attitudes, Beliefs and Behaviors in Kansas

LESA F. BRAY, R.N., B.S.N.,* Topeka

A new threat to public health and safety emerged in the early 1980s with the identification of a peculiar syndrome which effectively laid waste to hundreds of young Americans, primarily young, white, gay men residing on the west coast. The retrovirus, human immunodeficiency virus (HIV), was identified as a causal agent of acquired immunodeficiency syndrome (AIDS).¹

Testing for HIV antibodies from blood donations began soon after the virus was identified, and by 1985 all U.S. blood banks tested for the antibodies to the virus causing AIDS.² Within the Kansas Department of Health and Environment (KDHE), efforts began in 1985 to provide additional, alternative HIV counseling and antibody testing sites. KDHE continues to provide financial and technical support to multiple test sites throughout Kansas.

In 1981 Kansas reported the first case of a resident diagnosed with AIDS. Since that time, 325 cases (as of February 1, 1990)³ have been reported to KDHE, as required by KSA 65-6002 and KAR 28-1-4. Testing and case surveillance provide critical epidemiological information about AIDS in Kansas.

The prevention and reduction of the spread of this virus furnish a unique challenge to public health educators, since primary methods of transmission include sexual intercourse and drug use. Societal attitudes and beliefs concerning these issues affect public AIDS health education efforts.⁴

KDHE, in support of ongoing activities of surveillance and prevention of infection with HIV, initiated a telephone survey of 682 Kansas residents about AIDS during the spring of 1989. The survey, conducted by the Institute of Public Policy and Business Research at the University of Kansas, addressed 27 questions concerning knowledge, attitudes, beliefs and behaviors about AIDS.⁵

*Director of AIDS Education, Kansas Department of Health and Environment.

Address correspondence and reprint requests to the author at Landon State Office Building, Topeka, Kansas 66612.

Selected Findings: Self-Assessed Knowledge

Overall, most Kansans are aware of AIDS, with only 18% indicating little or no knowledge. National Center for Health Statistics studies citing data collected during October and November of 1988 demonstrate 26 and 25% knowing a little about AIDS, while 9% knew nothing.

General Knowledge

The scores on general knowledge about transmission indicate that questions were correctly answered on average 74% of the time. The accuracy of responses identifying the correct modes of transmission is high (94% accuracy). But the accuracy of responses identifying the incorrect modes of transmission is low (36% accuracy). The difference between these two scores is significant because it indicates retained *misinformation* as well as retained correct information.

Perhaps most striking is that over 30% of respondents believe being bitten by a mosquito or other insect may transmit the AIDS virus. This percentage is nearly the same for rural and urban respondents. By comparison, over 90% of respondents believe having sex without using condoms may transmit the AIDS virus. The public seems to know how the AIDS virus is spread, but they don't know how it is *not* spread.

Ninety-four percent believe that being homosexual is a likely way of getting the AIDS virus. Avoiding people who are thought to be homosexual was an action being taken by 24% of respondents because of concern over AIDS. Potential for discrimination based on sexual orientation may be inferred.

Sources of AIDS Information

Television and newspapers were primary sources of information about AIDS, although the media ranked lowest in perceived trust. Health professionals and educators were moderately identified as informational sources, but were ranked highest in trust.⁵

AIDS Virus Test

Perceived accuracy of the AIDS virus test is rel-

atively high (74%). Incorporating information regarding the accuracy of test results in health risk assessment may encourage those at risk to be tested.

Nearly 75% of respondents believe all medical workers should be tested. Less than half of the respondents thought mandatory testing of hospital patients was appropriate. The majority of respondents believe persons convicted of sex crimes and persons with sexually transmitted diseases (STDs) should be required to be tested, as well as persons applying for a marriage license. There did not seem to be a consistent rationale with regard to whom should be tested.

Who should receive the test results was also an area of mixed responses. Most respondents favored the information being given to personal physicians, sex partners, family member(s) and public health officials. A majority opposed giving the information to employers. Younger respondents were less in favor of results being given to family members, public health officials, employers, insurance companies and school officials.

Attitudes/Knowledge

Quarantining persons with AIDS was favored by very few, overall. Persons 50 years of age and over and in rural areas were more likely to indicate quarantine as an acceptable measure.

Greater than 90% of all respondents support making it a crime for people with the AIDS virus to knowingly pass it on.

Behaviors

Changes in behavior or in being tested due to concern for AIDS were not substantial. Only 10% said they had been tested; however, 17% believe they may have been exposed to the AIDS virus. Younger respondents, females and urban respondents were more likely to have been tested or to change their behaviors. Forty-one percent of those ages 18 to 29 use condoms.

Six percent of respondents indicate that they donate blood less often due to concern about

(Continued on page 78.)

Public Fears Contracting HIV In Physicians' Offices

In a nationwide telephone survey reported in *JAMA*,* 45% of respondents felt that physicians who are infected with HIV should not be allowed to continue to practice medicine. Almost 60% said that infected surgeons should not be allowed to continue to work, even if they are physically and mentally capable of performing surgery.

Of respondents who had seen a doctor in the past five years, 85% believed it was likely that the virus could be transmitted from an infected physician to a patient. They said they would be inclined to change physicians. Of those respondents who thought such transmission unlikely, 42% said they, too, would seek another physician.

According to the authors of the survey, the great majority of patients want to know the HIV status of their physician. But only one-third want to know if the physician is treating HIV-infected patients. About half of the respondents did not know whether or not their physician was seeing such patients.

The survey authors conclude that their data are "especially troubling for physicians who are infected with HIV. For HIV-infected physi-

cians, fear of loss of livelihood seems well founded, given the large proportion of the population that thinks infected physicians should not continue to work."

Commenting on the survey, Nancy W. Dickey, M.D., past chairperson of the AMA Council on Ethical and Judicial Affairs and a member of the AMA Board of Trustees, advised HIV-infected physicians to "consult with their own physicians and with colleagues to establish limits to their practices so that there will not be a risk of transmission of disease to their patients."

According to Dr. Dickey, physicians have no ethical obligation to tell their patients if they carry the AIDS virus. If there is no risk to patients, such disclosure serves no purpose, she states.

"There is need for education of the public regarding . . . AIDS, transmission of the disease, and, perhaps most important, the steps that the medical profession has taken to protect patients," she says.

*October 13, 1989.

Helping Kansas Youths to Prevent Sexually Spread HIV Infection

MICHAEL D. BROWN, R.N., B.S.N.,* *Topeka*

As of January 31, 1990, AIDS had been diagnosed in 21,730 male and 3,071 female Americans 20–29 years old.¹ Since it can take years after infection with the human immunodeficiency virus (HIV) for symptoms of AIDS to appear, it may be that many of these 24,801 young adults (20% of 121,645 total cases) were infected with HIV as teenagers.

That possibility is corroborated by the fact that in the United States, and in Kansas, for both males and females, the age group with the highest rates of most sexually transmitted diseases (STDs) other than AIDS is just 15 to 24 years old.¹ For example, during 1989 the following numbers of Kansas youth were reported to have been treated for gonorrhea: age 15–19 years, 1,617; age 10–14 years, 100; and age 5–9 years, 1.

Between October 1985 and December 1988, the rate of positive HIV antibody tests among 10,754 Kansas military recruits (male and female) 17 to 19 years old was four positives per 1,000, the same rate as among all 1,064,235 American recruits in that age group.²

Another sign that Kansas young people are at risk for sexually spread AIDS are the statistics for teen pregnancies. During 1987, Kansas girls aged 11 to 17 years had 2,054 live births, induced abortions or fetal deaths. In 1988 that figure grew to 2,094.¹

Like people in other age groups, Kansas school-age boys and girls can protect themselves 100% from sexually transmitted AIDS, many other STDs and unplanned pregnancy by practicing abstinence. They can protect themselves nearly 100% by correctly using spermicidal latex condoms, plus spermicide containing nonoxynol-9.³ Unfortunately, these youths are not yet willing to take the steps necessary to protect themselves. (See sidebar on page 71.) Such facts suggest that Kansas physicians could assist their communities in

developing cost-efficient and effective ways to help motivate their school-age children to avoid sexually transmitted HIV infection.

A Successful Related Prevention Program

A public school system in a rural, low-income, undereducated area in South Carolina reduced its pregnancy rate among female students 14 to 17 years old by a striking 63% from 1982 to 1984.⁴ Subsequent student-outcome program evaluation showed that that rate fell even more over the next two years. The 1984, 1985 and 1986 annual pregnancy rates for girls 14 to 17 years old in three similar South Carolina counties were generally at least 100% higher than the 1984–86 rates for the intervention area.

The program's primary goal is that teenagers and pre-teenagers postpone their first sexual intercourse at least until they finish high school. For those youths who do have sexual intercourse, the program's secondary goal is for them either to stop having intercourse until they graduate from high school or to use efficacious contraception. Unlike similar programs oriented toward girls, this program targets both sexes.

The program consists of active participation by parents, public school administrators and faculty, churches and their clergy, selected student leaders ("peer educators"), a full-time professional health education coordinator, the local school board, other elected public officials, health care and other pertinent civic agencies, the mass media and other concerned area residents.

Parents and clergy helped plan program implementation and upkeep before the intervention began. They were given a course of five weekly 90-minute informational classes on helping school-age children to:

- communicate well with parents and others,
- formulate an appropriate value system,
- develop reasonable decision-making skills,
- enhance their self-image, and
- acquire knowledge about human reproduction and birth control.

*Address correspondence and reprint requests to the author c/o Helen Gee, Haskell Foundation, Haskell Indian Junior College, 155 Indian Avenue, Lawrence, Kansas 66046-4800.

Several of these parents and clergy are still some of the program's most visible supporters.

Before and during the intervention, faculty and guidance counselors were recruited to take three preparatory courses that would enable them to help students facilitate more open discussion on human sexuality with parents and others, gain a reasonable sense of personal responsibility, better comprehend their own actions, reduce their worries about their normal development and emotions, acquire accurate information about human sexuality and learn to be more assertive with others.

Six local elementary, middle and high school teachers then prepared a family life and sex ed-

ucation curriculum with help from several consultants. They and other citizens formulated the kindergarten-through-twelfth-grade general instructional plan with special education students in mind. According to that curriculum, pregnancy-prevention-related content is taught in a variety of courses and/or classes.

Female and male peer-educators are chosen mostly from 10th- and 11th-grade students. They must demonstrate an interest in communicating informally and well with fellow students about pregnancy prevention facts and other aspects of human sexuality. Peer-educator applicants must have their parents' consent. They must finish 70 hours of classes before and after school and on

Popularity and Convenience Are Teens' Reasons for Using Condoms

Although most adolescents knew that condoms are an effective contraceptive and that they can help to prevent STDs, including AIDS, there was no significant association between intentions to use condoms and believing that they prevent disease and pregnancy, according to a recent study.*

"Believing that condoms are easy to use and enable one to have spontaneous sex contributed to the intention to use them among both male and female adolescents," the authors wrote. "Likewise, for both sexes, believing that condom use is popular with peers encouraged their use. Many females say they would use condoms because they are clean and because their use would require their partners to use self-control. The latter point may reflect a desire on the part of female adolescents that male adolescents participate in contraception and not leave the entire responsibility to them."

But not all adolescents saw benefits to using condoms. Among males, more than one-third of the study sample believed that condom use is painful. Nearly half of the females considered them inconvenient, and others thought they were not clean and would interfere with sexual spontaneity.

The authors of the study conclude that physicians' (and others') communications with adolescents "must focus on the social and physical aspects of [condom] use," in addition to dis-

cussing disease prevention and health factors. To encourage condom use among sexually active teenagers, health messages must take into account what adolescents already believe and should highlight those beliefs most likely to serve as incentives. Such messages should mention shared responsibility for contraception, and the facts that condoms are easy to use, enable spontaneity, are clean and are used by many other teenagers. The authors add that since many female adolescents visiting physicians or clinics are there to obtain prescription contraceptives, they should be encouraged to use condoms or add condoms to their sexual practices as they initiate prescriptive methods.

The study group consisted of 345 females and 161 males between the ages of 14 and 19 who visited two health care clinics in San Francisco. The mean age was 16.5 years. Thirty-two percent of the females and 43% of the males were virgins, and 59% of the females and 63% of the males had previously used condoms. The authors of the study caution that the extent to which the findings of the study may be generalized to adolescents not attending health care clinics is not known.

*Reported in *American Journal of Diseases of Children*, August 1989.

TABLE 1
IT PAYS NOW TO WAIT
A Young Man's Sexual Health Promotion Rap Song
(94 beats per minute)

Listen, young men, and you shall hear
About common sexual health problems lurking near.
It's hard to cure some diseases from sex you get.
Being a father early is harder yet.
Don't make a baby early; don't be a fool.
Being a daddy too soon can make you drop out of school.
There's no vaccine or cure for herpes or AIDS.
Why take a chance and die from AIDS at your age?
It pays now to wait 'til the time is right!
It pays now to wait 'til your future looks bright!!
Control yourself today and you'll be glad —
You wait 'til you're ready to be a dad!!!

weekends, on topics including good communication with parents and others, acceptable values clarification, making wise choices, positive self-image and human reproduction and contraception.

An examination of this effective scientific research- and theory-based program may reveal elements that Kansas physicians can urge their own communities to adapt and apply to local health care, school curricula at all levels, youth groups and other organizations to help their youth to avoid HIV spread through sexual activity. More details about the South Carolina program will be found in the publication *Reducing Unintended Adolescent Pregnancy Through School/Community Educational Interventions: A South Carolina Case Study*.⁵

Kansas AIDS Prevention Initiatives

A health promotion flyer prepared by this author and Kay Tsouhlarakis is reproduced on pages 00 and 00. It can be photocopied (two-sided) and folded in thirds to make sexual health promotion/AIDS prevention pamphlets for distribution to young male patients. Permission is not needed for this purpose. The pamphlet's layout and theoretical concepts are based on Rosenstock's Health Belief Model.⁶

Another means of reaching young people is through television, and particularly through popular music on television. The non-profit Haskell Indian Junior College Foundation is selling a customized 30-second public service announcement (PSA) performed as a rap song by two Topeka high school students. The song, entitled "It Pay\$ Now to Wait," is directed primarily at young men, and stresses the advantages of abstinence in avoiding early fatherhood and STDs. (See Table 1.)

The content of the lyrics is based on Rosenstock's Health Belief Model. The 30-second PSA is customized to end with a short tag consisting of wording and logo of a sponsoring organization. The cost to the sponsoring organization is \$100. Television stations are asked to play the tapes as time permits. More information about this project is available from the author.

It appears that the brochure, PSA and at least some aspects of the South Carolina program have potential to help motivate school-age youths to prevent HIV spread by sexual activity. But that potential can only be realized through the efforts of many dedicated individuals. Kansas physicians are in a unique position to lend support to such efforts.

REFERENCES

1. Data available from Kansas Department of Health and Environment.
2. Data available from NNAAPC, 6239 College Avenue, Suite 201, Oakland, CA 94618.
3. Brown MD. Spermicidal condoms. *Kansas Medicine* 1988;89:114-15.
4. Vincent ML, et al. *Reducing unintended adolescent pregnancy through school/community educational interventions: A South Carolina case study* (Atlanta: Centers for Disease Control, 1988).
5. Available from Professor Murray Vincent, Dept. of Health Promotion and Education, University of South Carolina, Columbia, SC 29208. Checks for \$3.50 should be payable to University of South Carolina.
6. Rosenstock IM. Understanding and enhancing patient compliance with diabetic regimens. *Diabetes Care* 1985;8:610-16.

The health promotion flyer mentioned in the article above appears on the following two pages. This pamphlet may be reproduced as needed without obtaining permission from the authors or KANSAS MEDICINE.

To make copies for distribution to your patients, have the material on pages 73 and 74 photocopied on an office copier, using two-sided copying. (Colored paper makes them more attractive.) Then fold each sheet twice to make a six-paneled pamphlet.

Put some in your waiting room or hand out to your patients as appropriate.



How Are AIDS and Other STDs Spread?

STDs are spread during close sexual activity like sexual intercourse, oral sex and anal sex. AIDS is spread through the exchange of blood, semen and vaginal fluids. It is certainly spread through sexual intercourse! Although American gay and bisexual men are at highest risk for getting AIDS, more and more "straight" (heterosexual) men and women are getting AIDS. More than 2,200 American males have likely gotten AIDS from sexual contacts with females.

The AIDS virus can also be passed from mother to baby during pregnancy, in childbirth or maybe from breastfeeding. It can be passed along when an IV drug user uses a needle after it was used by someone infected with HIV. The AIDS virus is not known to be spread through everyday contact like living in the same house, shaking hands, being coughed or sneezed on, "dry" kissing or sharing dishes or food with a person infected with HIV.

What If You Think You May Have an STD?

If you think you may have an STD, you need to get tested and treated right away. Treatment and information are available from your doctor or health clinic.

If you do have an STD, tell your partner(s) so they can be tested and treated. If they are not treated, they can spread the disease. They may give it to you again!

How Can You Protect Yourself From STDs?

The only 100% effective protection is not to have sex. But if you choose to be sexually active now, you can protect yourself by:

- Having few partners (safer if just one).
- Using latex condoms. *When used properly*, spermicidal latex condoms protect you well, but not 100%, from many STDs, even AIDS.
- Having your partner use spermicide. Spermicides help prevent many STDs.
- Knowing the signs of STDs. If you notice that you have penis discharge, burning when you urinate, pubic rash/sores/itching, or other genital symptoms that worry you, see a doctor soon.

had sex with someone with an STD. Do not let the disease that you may have lead to complications for you or anyone else. Gonorrhea and chlamydia can cause sterility in you and your sex partner(s). There is *no cure* for AIDS and genital herpes.

- If you have an STD, not having sex until your doctor says you're cured.

Where Can You Get More Information?

If you want to talk with a well informed person about STDs and birth control, visit your doctor or health clinic. You can also get written handouts from your doctor or health clinic and books from your public or school library, or from a bookstore. Sex education/family life courses are offered in some schools and other places.

To ask questions by telephone almost anytime, the toll-free numbers are:

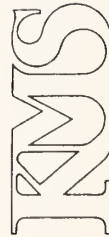
- U.S. AIDS: 1-800-342-2437
- Other STDs: 1-800-227-8922.

HAVING SEX NOW IS RISKY!

REMEMBER:

The best protection is prevention.
Avoidance of sex for now is best.

If you have sex now, protect yourself and your partner as well as possible!



KANSAS MEDICAL SOCIETY

1300 Topeka Avenue · Topeka, Kansas 66612

Tough Decisions

This can be a great time in your life! Being on your own more and making your own choices is what you've always waited for. Yet it can be confusing to make decisions about school, work, partying and dating.

Sexual decisions may be quite difficult. Pressures from TV, your girlfriend, other friends, popular songs, movies, videos and magazines add to the confusion of choosing what is best for you. If you would like help in deciding what is best for you sexually, then talk over your concerns with adults you feel comfortable with, such as an older brother, a family friend, a doctor, your parents, your minister, a school counselor/coach/teacher/nurse, a youth group leader or county health department staff.



Deciding not to be sexually active may be the best choice for you now. The decision is yours. It's your choice to say "yes" or "no." Remember, it's okay to say "no!" If you do decide to have sex now, there are a few things you should know and think hard about.

What Are the Risks?

If you choose to be sexually active, you and your partner are taking chances like:

- Becoming parents before both of you are ready and want to be parents.
- Getting AIDS, which now is epidemic and always fatal.
- Getting other sexually transmitted diseases.

Why Should You Care About Birth Control?

Roles and attitudes about sex are changing. Birth control is no longer considered to be the responsibility only of women and girls. You play a big part in whether and when your girlfriend becomes pregnant and you become a father.

Avoiding an unplanned-for conception together helps a couple build a feeling of trust. Women appreciate men who care enough about them to discuss sexual decisions. Talking about those choices, even if you're embarrassed, could bring you closer together.

Some birth control methods also protect you and your girlfriend from AIDS, and other sexually transmitted diseases.

What Birth Control Choices Do You Have?

There are two effective birth control methods you can use with little or no help from your girlfriend:

- You can decide not to have sex until you both complete your education and marry.
- If you do have sex now, use condoms.

Not having sex is the only 100% reliable birth control method. Show affection toward your girlfriend without having intercourse. Pleasant activities like talking, touching, holding hands, caressing, hugging, dancing, kissing or just being close provide warm, loving and safe intimacy.

Latex condoms, or "rubbers," are the only devices young men can use to prevent fatherhood. Condoms can be at least 88% effective *when used correctly*. They can be up to 99% reliable when you use spermicidal condoms while your partner uses a spermicide.

Condoms are safe (no side effects), inexpensive, and easy to buy and use. They have another key benefit, too. Condoms protect both you and your partner well, though not 100%, from many sexually transmitted diseases. Spermicidal and plain latex condoms are available at many clinics and drug stores.

What Other Methods of Birth Control Can You and Your Girlfriend Use?

Several other methods are available that you and your girlfriend may choose from:

- **Birth Control Pills.** The Pill contains agents which prevent a female from releasing eggs and protect her almost 100% against pregnancy.
- **Diaphragm.** A rubber shield is placed in the woman's vagina to block sperm. It works best when used with spermicide.
- **Sponge.** A synthetic sponge about two inches across, containing spermicide, is inserted into the woman's vagina to effectively block and kill sperm.
- **Spermicide.** A sperm-killing foam/cream/jelly/tablet/suppository is placed in the woman's vagina before having sex. This works best when used with a condom or diaphragm.
- **Natural Family Planning.** This is having sex when your partner is not likely to be fertile. This method requires much cooperation within a couple. It needs to be explained in detail to you and your partner by a doctor or nurse.
- **IUD.** A plastic device is placed inside the woman's uterus. IUDs were common, but are not as readily available now.

The Pill, diaphragm and IUD require a doctor's examination. They are available from doctors and health

climates. You will likely need an appointment.

All methods of birth control work best when you help each other. If your girlfriend is scared to see her doctor, you can go with her. Your being in the waiting room can reassure her and let her know you care. If getting condoms embarrasses you, she can go with you.

Poor Methods of Birth Control

Some methods are *not reliable* and should not be used:

- The man pulling his penis out of the woman's vagina before he "comes" helps little to avoid pregnancy, since sperm are released throughout intercourse.
- Your partner douching after sex is also not effective.

What If Your Girlfriend Gets Pregnant?

Kansas girls 11 to 17 years old had 2,054 babies, abortions or stillbirths in 1987. And in 1988 they had 2,094. Those situations were not just the girl's problem. Their sex partners also had hard questions and choices to deal with:

- Does the young man want to marry the woman and help her raise their child?
- Will he have to drop out of school and go to work to support her and the child?
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- How does he feel about abortion and adoption?
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What is AIDS?

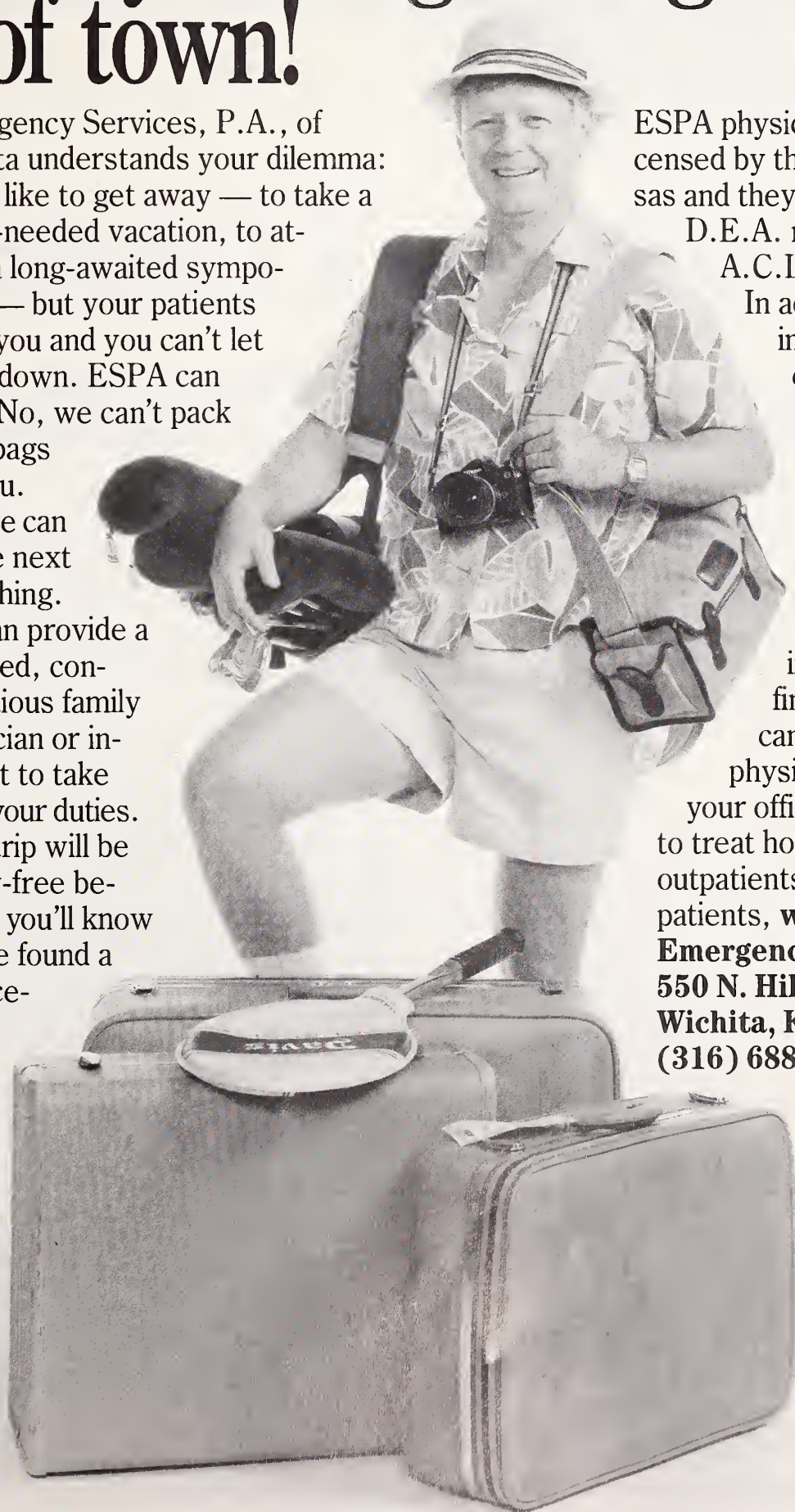
AIDS harms the body's immune system so it cannot fight off infections and cures that currently kill *all* people who get AIDS. AIDS is caused by a germ called the human immunodeficiency virus (HIV). There is *no cure* or vaccine for AIDS.

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1990 AIDS LEGISLATION

(Continued from page 60.)

posed to HIV. The expanded authority is permissive, and language is added which makes it clear that the physician does not have a legal duty to warn.

Senate Bill 529 was amended by the Senate Public Health and Welfare Committee as requested by KMS and recommended for passage. By the time this article is printed, the bill probably will have been passed by the Senate and referred to a House committee.

Another bill being considered would allow a court to order involuntary testing of a person if there is reason to believe (probable cause) that emergency medical or law enforcement personnel have been exposed to the person's bodily fluids. This legislation applies to testing for hepatitis B and meningococcal meningitis, as well as HIV and, of course, would apply only if the person refuses to submit voluntarily to testing.

AIDS AND HIV

(Continued from page 65.)

physicians in the community will be necessary as the case loads continue to increase. The public health system in Kansas should prepare itself to work cooperatively with practicing physicians to provide the care and preventive measures needed to control the HIV epidemic through the rest of this century.

REFERENCES

1. Centers for Disease Control, Kansas Department of Health and Environment AIDS Program, Kansas City Metro Health Department.
2. National Center for Health Services Research and New Jersey Department of Health.
3. Public Health Service Plan for the Prevention and Control of AIDS and the AIDS Virus, Report of the Coolfont Planning Conference, June 4-6, 1986, United States Public Health Service.
4. Guide to Public Health Practice: State Health Agency Programmatic Response to HTLV-III Infection, Public Health Foundation, June 1986.
5. Report to President George Bush, National Commission on Acquired Immune Deficiency Syndrome, Dec. 6, 1989.
6. The Commission on Access to Services for the Medically Indigent and Homeless, Report and Recommendations on Access to Services for the Medically Indigent, December 1988.
7. National Center for Health Services Research.
8. New Jersey Department of Health.
9. Francis DP, et al. Targeting AIDS Prevention and Treatment Toward HIV-1-Infected Persons: The Concept of Early Intervention. *JAMA*, Nov. 10, 1989, 262; 18.
10. Konigsberg, Charles. The Broward Network for Comprehensive Care for AIDS: A Public Health Response. *Journal of the Florida Medical Association*, Apr. 1989, 76; 4.

AIDS KNOWLEDGE

(Continued from page 69.)

AIDS. This is a significant problem, since there is no risk of HIV infection from donating blood.

Identified Personal Risk

Younger respondents, females and urban respondents were more likely to indicate they may have been exposed to the AIDS virus. Only 4% of all respondents identified themselves within one or more of the listed risk categories.

Summary

Clearly, medical professionals and educators must mobilize in supporting personal, professional and public AIDS education efforts. AIDS health education should continue to emphasize facts and dispel myths about risk associated with blood donation, casual contact, mosquitos and sharing eating utensils. Messages should encourage counseling, testing for those at risk and resource referrals, and should urge compassion.

The noted differences in demographic categories indicate a need to expand sampling within sub-populations, specifically non-white populations, younger adults and medical professionals. Emphasis on gathering further, more specific behavioral information should be incorporated into community-based prevention programs. Continued assessment of sources of information, referral for AIDS-related services and prevalent AIDS policies should be incorporated statewide.

REFERENCES

1. Edelman R, Haverkos H. The Epidemiology of Acquired Immunodeficiency Syndrome Among Heterosexuals. *JAMA* 1988;260(13):1922-28.
2. Eisenstaedt R, Getzen T. Screening Blood Donors for Human Immunodeficiency Virus Antibody: Cost-Benefit Analysis. *Am J Public Health* 1988;78(4):450-54.
3. AIDS Update: Diagnosed Cases through February 1, 1990. KDHE AIDS Section.
4. Becker M, Joseph J. AIDS and Behavioral Change to Reduce Risk: A Review. *Am J Public Health* 1988;78(4):394-410.
5. Bray L. AIDS Knowledge, Attitudes, Beliefs and Behaviors in Kansas. Report by the Kansas Department of Health and Environment, 1989.
6. Berry C. The AMA Trains Doctors to Take the Podium. *HealthLink* 1987;3(3):18-19.

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Coronary Thrombolysis and Gender

DONALD L. VINE, M.D.,* *Wichita*

The initial report of the Italian intravenous thrombolytic trial of streptokinase for the treatment of acute myocardial infarction (GISSI)¹ stressed the benefits for men, anterior infarction and patients less than 65 years of age. The early benefit for women was lost after one year's follow-up.

Women

There are now three large, randomized trials which compare thrombolytic therapy to placebo for the treatment of acute myocardial infarction in women as well as men. Two of these trials, the Italian (GISSI) and International (ISIS-2)² trials compared streptokinase with placebo, while the Anglo-Scandinavian (ASSET)³ trial used tissue plasminogen activator (rt-PA).

The trials and the number of men and women in each are summarized in Table 1. The total number of women reported, 7,316, is 28% of the total number of men.

Mortality

The overall mortality for women, 16.1%, was twice that of men, 8%, and ranged from 9.8% for the ASSET trial to 20.5% for GISSI. For each trial the mortality of women was higher than men, whether they were treated with active lytic agent or placebo. In each trial, however, there was a significant reduction in mortality for women treated with thrombolysis in comparison to placebo.

The absolute reduction in mortality, determined by subtracting the mortality of treated patients from that of the control patients, was similar for men and women (Figure 1). The reduction in mortality for women ranged from 2.3% for the ASSET trial to 5.2% for the ISIS-2 plus ASA group and was similar to the absolute reduction in mortality of 1.8 to 5.3% observed for men.

The relative reduction in mortality, determined by dividing the absolute reduction by the control

TABLE 1
CORONARY THROMBOLYSIS AND GENDER
TRIAL CHARACTERISTICS

<i>Trial</i>	<i>Agent</i>	<i>ASA</i>	<i>Women</i>	<i>Men</i>
GISSI	SK	No	2,313	9,398
ISIS-2 no ASA	SK	No	1,951	6,585
ISIS-2 & ASA	SK	Yes	1,911	6,618
ASSET	rt-PA	No	1,141	3,863
Totals			7,316	26,464

Abbreviations: SK = streptokinase, ASA = aspirin, rt-PA = tissue plasminogen activator

mortality, ranged between 17.6% for women in the ISIS-2 no ASA trial to 29.9% for women in the ISIS-2 plus ASA trial. The values for men ranged between 16.8% for the GISSI trial and 44.5% for the ISIS-2 plus ASA trial.

When the results of these trials are averaged and the women treated with lytic therapy are compared to those treated with placebo, there is a 3.9% reduction in death favoring treatment (Figure 2). This benefit is similar to the 3.0% absolute reduction in mortality experienced by men treated with intravenous lytic therapy. Since the control mortality in women is greater than it is in men and the absolute reductions in mortality

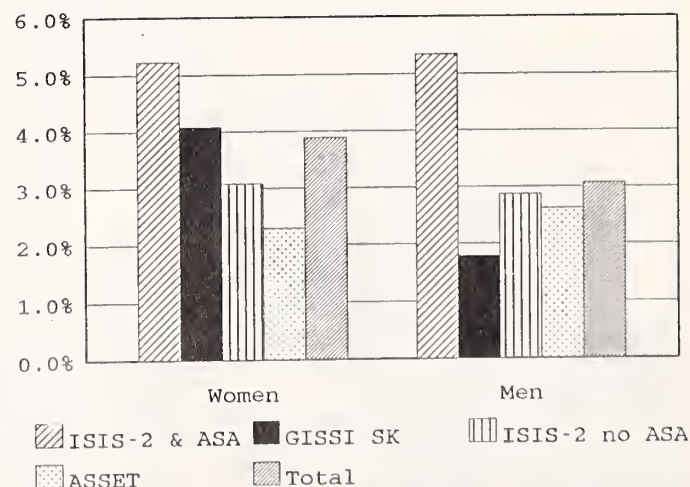


Figure 1. Absolute reduction in mortality relative to gender. (Abbreviations as in Table 1.)

*Associate Professor, Department of Medicine, University of Kansas School of Medicine-Wichita

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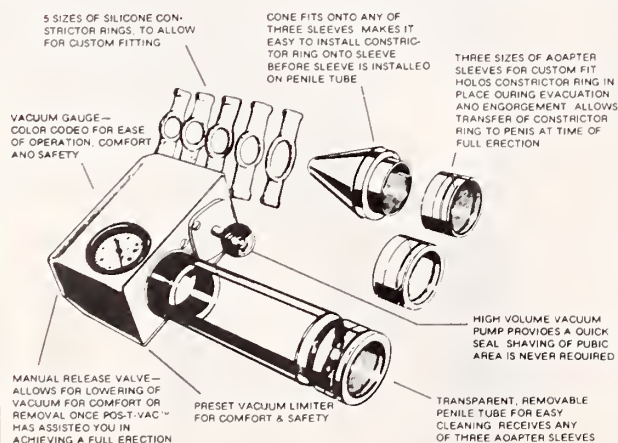
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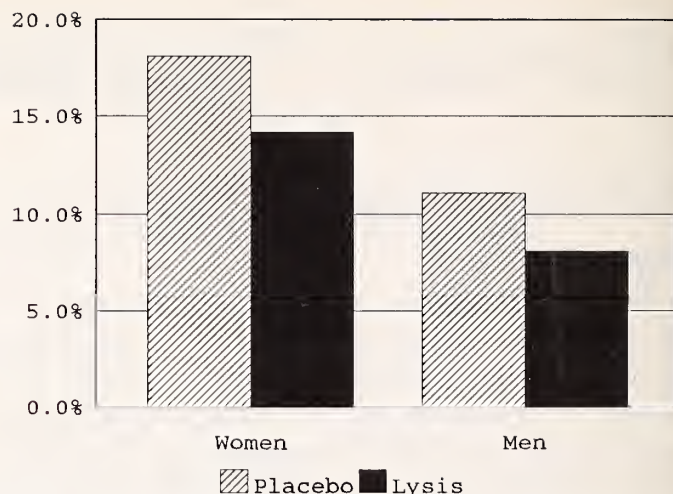


Figure 2. Mortality of acute myocardial infarction relative to gender and thrombolytic therapy — three-trial average.

are similar, the relative reduction in mortality for women, 21.5%, is less than the 27.6% observed for men.

Comments

These studies demonstrate a similar benefit for women and men treated with lytic therapy following acute myocardial infarction and provide no scientific foundation for basing therapeutic decisions regarding lytic therapy on gender alone.

Reasons for the increased mortality among women are not explained, but may be related to other factors, such as age or location of the infarction, which were not evaluated with respect to gender in these studies.

REFERENCES

1. Effectiveness of intravenous thrombolytic treatment in acute myocardial infarction. Gruppo Italiano per lo Studio della Streptochinasi nell'Infarto Miocardico (GISSI). *Lancet* Feb 22 1986;397-402.
2. Randomized trial of intravenous streptokinase, oral aspirin, both, or neither among 17,187 cases of suspected acute myocardial infarction: ISIS-2. ISIS-2 (Second International Study of Infarct Survival) Collaborative Group. *Lancet* Aug 13 1988;349-60.
3. Wilcox RG; von der Lippe G; Olsson CG; Jensen G; Skene AM; Hampton JR. Trial of tissue plasminogen activator for mortality reduction in acute myocardial infarction. Anglo-Scandinavian Study of Early Thrombolysis (ASSET) *Lancet* Sep 3 1988;525-30.



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**ABOUT OUR LOGO**

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

Geologists love Kansas not so much for its amber waves of grain or fruited plains as for what lies under them — and occasionally pushes up in strange forms. The uninitiated see expanses of land whose monotony is only occasionally interrupted by those irregularities, and natives view the landscape with varying degrees of affection, depending upon personal conditioning. But geologists see millennia of growth and change, as measured by fossils, strata and chemistry that tell us much of what we are and where we came from.

A case in point is represented by Jim Hamil's exposition of the gypsum hills near Medicine Lodge. The mesas and buttes in this area, designated the Red Hills, are products of what geologists and paleontologists call the Permian period, a mere 50-million-year phase in Kansas history beginning some 290 million years ago. More specifically, these formations are remnants of red shales, siltstones and sandstones exposed as the great ocean that once covered Kansas became a part of this prolonged history. They didn't just sit there, however, but became submerged again by the surface soil we see, to emerge at some later point by the strong but patient forces understood only by those geologists.

Just as we cannot really understand the galactic measures of distance which we are confronted with these days, we cannot really understand the concept of time expressed in these events, but there is a direct connection with medical practice of our day — give or take a few centuries. Medicine Hills, Medicine Lodge, Medicine River: they are more than just place names. The natives of the area knew what others would learn later (but attribute to their scientific wisdom rather than the Great Spirit to whom those natives rightly gave credit). The Indians recognized the medical value of the streams and springs in the area, but it was the nosiness of the white man that identified this as their content of various salts, notably magnesium sulfate, which would be the basis of therapies — and fortunes — unto this day.



Fatigue Uniform

We confess the matter sneaked up on us, not so much by our lack of awareness of the issue but by our discounting of its impact. The first publicized rumblings of discontent regarding the hours residents devote to their professional duties were interpreted simply as the current version of that noble pastime of training days: the gripe sessions in the interns' quarters. Even now our awareness of the public interest occupied no great attention until the appearance of a report that medical students are being abused and thus are at risk of later venting their anger on their patients.



It's a little late for us to be worrying about it personally, but the thought suggests that part of the unhappy state of medical practice (as viewed by many) has come from those of our generation projecting too much of our repressed hostility (born of our own mistreatment) on our patients. We have been paying too much attention to historical assurances of the high place of medicine in the social scale, despite the recent erosions. This calls for some serious soul-searching and *mea culpa* ponderings in regard to where we went wrong.

Perhaps the underlying problem in our (collective) embryonic medical days was that we didn't question the system. After all, we had eagerly pursued the effort to gain admission to medical school despite warnings it would be a tough road, and perhaps the most compelling terror came not directly from the stern agents of academic doom at the front of the room but simply from the overall fear of flunking out. Of course, we were scared — the freshman year still stands out as one of unrelenting terror. This fear was only slightly reduced after we actually did survive that year, but we realize this was due only to the development of moral and academic calluses that would one day determine our treatment of our patients. (Remarkably, though, the one professor who was feared and hated as the scourge of the freshman class became one of the most admired and revered individuals after we were past that point.)

So, unmindful of the damage being done to us (and one day transferred to our patients), we accepted the stress — not uncomplainingly, to be

sure. Gripe sessions were as essential to our experience as the academic pressures — and cheaper. This just led on into the *real* stress of the internship. (That brings a question to mind: what ever happened to the internship? Everyone seems to be a resident now. Perhaps that move was made because everyone — generalist or specialist — had been through the internship, and there was some thought that calling interns residents would relieve the unhappy attitudes of the internship.)

At any rate, everyone from students on up is now mistreated: unreasonable, even damaging, hours of work — and insufficient pay. This is another puzzlement — though the current crop of postulates is undoubtedly weary of hearing about it. It was understood that room, board and laundry was quite adequate remuneration, considering the real reward, the opportunity to serve at the side (well, behind, usually) the Great Ones. Only the crass would put a monetary value on such experience or think more than fleetingly that that financially stringent period would lead to a satisfying material reward in the future. The advice "interns can't take money" didn't originate in the interns' quarters, but it was primarily because of that noble tradition that poverty was identified with virtue. And it was accepted belief that hospitals that actually paid a stipend were of inferior quality. (Strangely, some of the products of such institutions turned out quite well.)

But it is a greatly different world we live in now. (Spouses, for example, are seen as a nurturing element, not venal distractions.) It is certainly true that the hours we put in decreased our efficiency and judgment. Perhaps we came out with the intent to vent our anger (and fatigue-generated ineptitude) on a trusting public and think only of income and time off.

It would be mindless to promote the attitudes and interpretations of the past in the current world, though we cling to the belief that our tie with our professional progeny remains a very-little-changed dedication to the same purpose of service. The situation has changed because it had to change. Our own feeling regarding the young of our profession we have met up with is one of admiration, gratitude and compassion for their fatigue — though we can't understand most of the terms they use or tests they rely on these days. **D.E.G.**

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References

1. *USP DI Update*, September/October 1988, p 120.
2. *Br J Clin Pharmacol* 1985;20: 710-713.
3. Data on file, Lilly Research Laboratories.
4. *Scand J Gastroenterol* 1987;22(suppl 136):61-70.
5. *Am J Gastroenterol* 1989;84:769-774.

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Indications and Usage: 1. *Active duodenal ulcer*—for up to eight weeks of treatment. Most patients heal within four weeks.

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Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

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3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

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Drug Interactions—No interactions have been observed with theophylline, chloridazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given

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an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. If was not possible to determine whether a variety of less common events was due to the drug.

Axid[®] (nizatidine, Lilly)

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to three times the upper limit of normal, however, did not significantly differ from that in placebo patients. Hepatitis and jaundice have been reported. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Because cross-sensitivity among this class has been observed, H₂-receptor antagonists should not be administered to those with a history of hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

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Additional information available to the profession on request.



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Samsel v. Wheeler

WAYNE T. STRATTON, J.D.,* *Topeka*

After almost a year, on March 21, 1990, the Kansas Supreme Court released its long-awaited opinion in *Samsel v. Wheeler*.

While some of the Court's comments regarding the development of the common law and the requirements of the Kansas Constitution are not easily understood, the significance of the decision is that the Court squarely recognizes the authority of the Legislature to modify tort law.



At issue in the case was the question of whether the \$250,000 limitation on pain and suffering passed by the 1987 Legislature was permitted by the Constitution of the State of Kansas. The Court not only upheld this limitation, but also upheld the 1988 legislation similarly limiting the damages for all non-economic losses.

A brief review of tort reform legislation passed over the last 14 years, stimulated by the injustices worked upon physicians and other health care providers, leads to an appreciation of the significance of the decision. Kansas is now firmly established as a state which has attempted to preserve the tort system by curbing its excesses. In recent years, the following changes have occurred:

1 Shortening of the statute of limitations for medical malpractice. Any claim must now be brought within two years, unless the injury is concealed, then within four years. Claims on behalf of minors must be brought within eight years.

2 The admissibility of evidence of payments for medical expenses by collateral sources. In the larger

cases there should be no double payment to a plaintiff.

3 A cap on punitive damages and adoption of a new procedure taking the determination of the amount of punitive damages from the jury.

4 Now, a lid of \$250,000 for non-economic damages.

Q: What does it mean?

5 Additionally, the Legislature has adopted provisions establishing screening panels and making their reports admissible; removing vicarious liability; establishing standards for expert witnesses providing various immunities and other similar legislation. The constitutionality of these provisions will be tested in the future.

The dissent by Justices Herd and Allegrucci vigorously argued that the decision represents an abandonment of the rights of the injured. After tracing 12 factors leading to higher verdicts, they concluded that the real cause of the crisis is the negligent injury of people. They conclude that tort reform is doomed to failure.

But it is the excesses of the 1960s that the Legislature is curbing. It is unfair to say the legislation has not worked, when the tort cases affected by the changes are only now working through the system. It is significant that the number of new claims filed against the Health Care Stabilization Fund has continued to drop for the third straight year.

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

Mr. Stratton's column on the National Practitioner Data Bank, originally scheduled for this issue, will be published in a future edition of KANSAS MEDICINE.

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Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

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Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

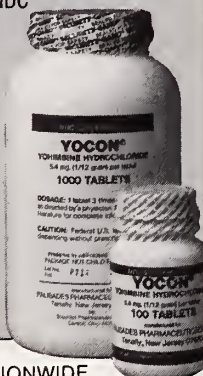
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Physician Survey on Unified Membership

In February the Kansas Medical Society mailed a survey to every licensed physician in Kansas, including all non-members, to gauge sentiment on the issue of "unified membership." Currently, the Kansas Medical Society is "unified" with the American Medical Association, in that all KMS members must also join the AMA.

The survey came about as a result of a request from the Wyandotte County Medical Society. The WCMS also requested that a resolution on this issue be introduced at the May House of Delegates meeting so that delegates could either reaffirm or repeal the unified membership requirement. A subcommittee of three physicians on the KMS Executive Committee reviewed and approved the survey prior to mailing.

Survey Results

While results were still coming in at press time, the 2,452 surveys returned (see Table 1) represent a 51% response rate (4,853 surveys were mailed, including 3,403 members and 1,450 non-members), the largest sampling of physician opinion on any poll taken by KMS.

In response to the question of whether AMA membership should be required or optional, almost 77% (1,883) of physicians favored optional membership. About 21% (511) of the respondents favored the status quo (required AMA membership), and 2% (58) had no opinion.

When responses were separated into member and non-member categories, the results were as follows: of 1,774 responses from members, 71% (1,257) favored optional AMA membership; 27%

TABLE 1
PHYSICIAN SURVEY ON UNIFIED MEMBERSHIP*
FEBRUARY 1990

"Please indicate whether you feel AMA membership should continue to be required, or optional, for membership in the Kansas Medical Society."

	Required	Optional	No Opinion	Total
Members	471	1,257	46	1,774
Non-Members	40	626	12	678
Totals	511	1,883	58	2,452

*Results as of March 20, 1990

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(471) favored the status quo; and 2% (46) had no opinion. Of the 678 non-members who responded, 92% (626) favored optional AMA membership; 6% (40) favored the status quo; and 2% (12) had no opinion.

Non-members were also asked if they would be likely to join KMS in the event unified AMA membership was repealed. Of non-members in active practice who responded (542), 85% or 461, said they would be "very likely" or "somewhat likely" to join KMS this year in the event unified membership was repealed.

Summary

It is quite clear from the survey results that Kansas physicians, by an almost 4 to 1 ratio, would favor a change in the unified membership requirement. Responses from non-members also indicate that better than 8 of 10 would be likely to join KMS if the unified membership requirement were dropped.

The results of this survey will be submitted to the KMS House of Delegates for consideration of this issue at the upcoming May 4 and 5 meetings.

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Health Access America

On March 7, the AMA unveiled a 16-point proposal to strengthen and reform the American health care system by improving access to affordable, quality health care services. The proposal, "Health Access America," calls for substantial reforms of the Medicare and Medicaid systems, and for required employer-provided insurance.

"We are facing a dilemma in this country today because over 30 million of our citizens lack health insurance coverage," said AMA President Alan R. Nelson, M.D. "Our proposal is the start of a comprehensive effort to repair the flaws in our system while continuing to provide the high-quality care that the majority of Americans have always known.

"The individual's freedom of choice remains a cornerstone of the American system — a system that does not place restrictions on where or from whom patients can seek medical service, nor allow others to dictate choices to patients," said Nelson. "Our present system does not provide access to everyone, and revision is badly needed. However, it is our belief that it would be counterproductive to 'fix' aspects of our system that are not broken but, in fact, work well." Nelson cited freedom of choice, individualized patient care, technological advances, a strong research community and superlative medical education as the major strengths of the U.S. system.

The AMA proposal is a blueprint for extending access, moderating health care costs, and sustaining the Medicare program to assure proper health care for all. The 16 points are:

1 Effect major Medicaid reform to provide uniform adequate benefits to all persons below the poverty level.

2 Require employer provision of health insurance for all full-time employees and their families, creating tax incentives and state risk pools to enable new and small businesses to afford such coverage.

3 Create risk pools in all states to make coverage available for the medically uninsurable and others for whom individual health insurance policies are too expensive and group coverage is unavailable.

4 Enact Medicare reform to avoid future bankruptcy of the program by creating an actuarially sound, prefunded program to assure the aging population of continued access to quality health care. The program would include catastrophic

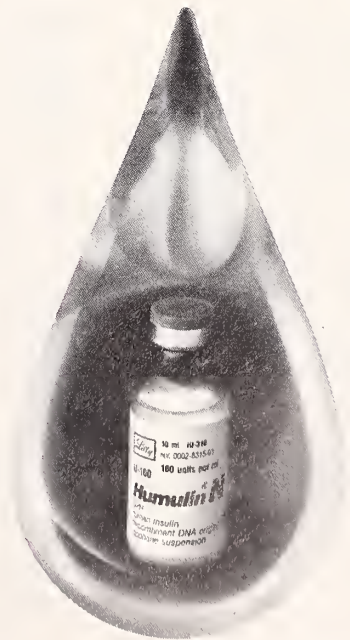
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benefits and be funded through individual and employer tax contributions during working years. There would be no program tax on senior citizens.

5 Expand long-term care financing through expansion of private sector coverage encouraged by tax incentives, with protection for personal assets, and Medicaid coverage for those below the poverty level.

6 Enact professional liability reform essential to reducing inordinate costs attributable to liability insurance and defensive medicine, thus reducing health care costs.

7 Develop professional practice parameters under the direction of physician organizations to help assure only appropriate, high-quality medical services are provided, lowering costs and maintaining quality of care.

8 Alter the tax treatment of employee health care benefits to reward people for making economical health care insurance choices.

9 Develop proposals which encourage cost-conscious decisions by patients.

10 Seek innovation in insurance underwriting, including new approaches to creating larger, rather than smaller, risk-spreading groups and reinsurance.

11 Urge expanded federal support for medical education, research and the National Institutes of Health, to continue progress toward medical breakthroughs, which historically have resulted in many lifesaving and cost-effective discoveries.

12 Encourage health promotion by both physicians and patients to promote healthier lifestyles and disease prevention.

13 Amend ERISA or the federal tax code so that the same standards and requirements apply to self-insured (ERISA) plans as to state-regulated health insurance policies, providing fair competition.

14 Repeal or override state-mandated benefit laws to help reduce the cost of health insurance, while assuring through legislation that adequate benefits are provided in all insurance, including self-insurance, programs.

15 Seek reductions in administrative costs of health care delivery and diminish the excessive and complicated paperwork faced by patients and physicians alike.

16 Encourage physicians to practice in accordance with the highest ethical standards and to provide voluntary care for persons who are without insurance and who cannot afford health services.

Goals and Accomplishments of the AMA

ALAN R. NELSON, M.D.*

On March 7, we announced the AMA's Health Access America proposal to a very crowded roomful of reporters in Washington.

We emphasized that it is a proposal, not a plan. And, in the months ahead, the AMA will be sitting down with representatives from the administration and Congress, business and labor, other healthcare providers, physicians and consumer groups to hammer out more detailed plans. Many of these will require Congressional action, and they will have a substantial impact on how we practice our profession in the years ahead.

The point I'm making is that, like it or not, the Big Ballgame is played in Washington, a fact that leaders of this organization recognized years ago.

It isn't by accident but by conscious effort that, for a long time now, the AMA has been considered one of the most effective organizations in achieving its goals in the Congress. Indeed, the AMA can point to a long list of successes.

For example, last year, proposals to establish "expenditure targets" (ETs) were defeated by a coalition sponsored by the AMA and composed of national, state and local medical specialty societies. Those ETs — annual dollar estimates for physician services that would be determined by the government without negotiating with the medical profession — would have forced physicians to do less for their patients' welfare. ETs would have been a very big step toward rationing healthcare. But the lobbying in Washington and a media blitz presented ETs as a patient care issue, and it worked. The defeat of ETs was an outstanding example of Federation teamwork against one of the medical profession's biggest challenges.

And last year, Congress endorsed, with AMA and Federation support, the move to a Resource-Based Relative Value Scale (RBRVS) as a new Medicare fee-for-service system. The AMA, representing the House of Delegates' position, is now a subcontractor in the Harvard University-based study that is developing the RBRVS. The Association is working to ensure that the study accurately reflects the views and experiences of prac-

*President, American Medical Association.



Dr. Nelson

ticing physicians, to provide advice, and to coordinate the efforts of specialty societies in nominating study consultants.

Just last month, the executive director of FAHS wrote to us, saying "I am writing to express my thanks to the AMA, Dr. James Davis [the AMA's past president] and your Washington office for the excellent representation on the Pepper Commission. The AMA efforts . . . were instrumental in making the Commission report acceptable to our members."

On the judicial side, the AMA appeared three times last year before the U.S. Supreme Court in defense of physician and patient rights. One case, in which the AMA brought other medical associations into a joint brief, involved the rights of disabled children to receive individualized medical judgment in determining eligibility for Medicaid.

During the last five years, the AMA has sued the federal government five times to challenge intrusive and arbitrary regulation. The AMA's first such lawsuit dates back to 1975, when the Association challenged regulations that mandated review of Medicare and Medicaid hospital admissions. The AMA won, and so did patients and physicians.

As far as the Administration is concerned, our people in Washington arranged a meeting between White House Chief of Staff John Sununu and Dr. James Todd within two days of his being appointed the AMA's acting executive vice president. And since then he's met with President Bush.

In Phoenix at the National Leadership Conference, some of you heard the new Health Care Finance Administration Administrator, Gail Wilensky, give her first public address.

Our people in Washington have set in motion plans to reinforce and, in some cases, rebuild old coalitions and create new ones that will help meet the AMA's goals and yours down the road.

Along with the AMA, 28 medical specialties signed a Congressional budget letter. Thirty-two

co-signed the ad that ran in the *Washington Post*, *New York Times* and *The Wall Street Journal*. And more than 20 have already signed the Statement of Access Principles.

So it's plain to see that the AMA has been highly visible and very active on the national scene, a policy that we intend to continue with even more vigor. It's a job that can be accomplished only with a national organization, in concert with the Federation and a coalition that includes national medical specialty societies. No other organization except the AMA can effectively represent the profession as a whole at the national level because of its stature and broad-based support.

The AMA has been busy on the homefront as well. In recent years, the AMA restructured from a group of individually operated staff units into a membership-driven organization with corporate-like direction and a marketing program designed to better serve our members and the public.

We've created a program to keep the environment of medicine under constant analysis through a socioeconomic monitoring system and public opinion polls, and to learn about physician attitudes on membership, desired services and project emphasis through mail and telephone surveys.

The AMA has developed many revenue-generating products and services which, together with sound investments, provide about 60% of the Association's revenues. That, of course, eases the pressure on dues-paying members.

We've expanded our policy-making bodies to provide broader representation, greater expertise and more varied views. The membership in the House of Delegates has been increased from 251 to 435, and now represents national medical specialty societies as well as medical students, residents, hospital medical staff, medical schools and young physicians.

In recent years, many of the AMA councils have become increasingly important. For example, our Council on Ethical and Judicial Affairs is a national voice on medical ethics. The AMA is in the leadership position on matters including conflict of interest, fetal tissue research and withdrawal of life support, and it is continuing its effort to strengthen the profession's ability to weed out unethical and incompetent physicians.

The Council on Scientific Affairs' activities have placed the AMA in the forefront on such issues as improvement of adolescent health, AIDS research, treatment of impaired health profession-

als, creation of a tobacco-free society and the humane use of animals in medical research.

The Association's Diagnostic and Therapeutic Technology Assessment project has developed into a primary source of information and guidance on new technologies for the medical and insurance communities.

The AMA, through its Office of Quality Assurance and with the participation of national medical specialty societies, is working with the Rand Corporation and a consortium of academic medical centers to develop parameters of care that will assist physicians in the diagnosis and treatment of specific diseases and conditions. Practice parameters will help physicians deal with the problems of cost humanely and in a manner consistent with the values of medicine.

For many years, the AMA has had a powerful and wide-ranging communications program that keeps physicians and the public informed on the intent of AMA activities. It is essential to the success of efforts in science, education and representation. The number and quality of papers submitted to the *Journal of the American Medical Association* has increased significantly, while *American Medical News* has become the nation's leading medicosocioeconomic publication.

American Medical Television, a weekly two-

hour program on the Discovery Channel, helps keep physicians and other health care professionals abreast of the latest medical developments. Moreover, physicians can earn continuing medical education credits by using the study guides and evaluations for the programs.

AMA/Net, the Association's electronic information network, provides a rapid flow of information between the AMA and individual physicians. Medical societies receive information from AMA headquarters through a similar program called FED/Net.

I could talk about many other AMA activities and accomplishments, but in the end, the AMA is a membership-driven organization. Without a strong membership base of support, it would be hard-pressed to carry out many of its programs.

Currently, our most important program, which will occupy many of our resources and much of our strength in the months and years ahead, is the AMA's Health Access America proposal that I mentioned earlier. Through Health Access America, we seek to strengthen our health care system without the radical and senseless restructuring of the total system. After all, if it's not busted, don't fix it.

But our health care system does have some deficiencies, and you recognize many of them.

Crisis in black and white.

Your personal crisis may be waiting in the morning mail. If so, you'll want the best professional help. You'll want a Medical Protective General Agent.

Professional liability coverage is our only business. And we've been providing it for almost 100 years. Our agents live in the territories they serve so they understand the local legal climate. And with the extensive resources of the home office Law Department to draw from, they're always ready to answer your questions or give advice.

Someday it may be you against a negligence charge. When that day comes and your professional reputation is on the line, you're going to want all the help you can get. To make sure you have it, contact your Medical Protective General Agent today.

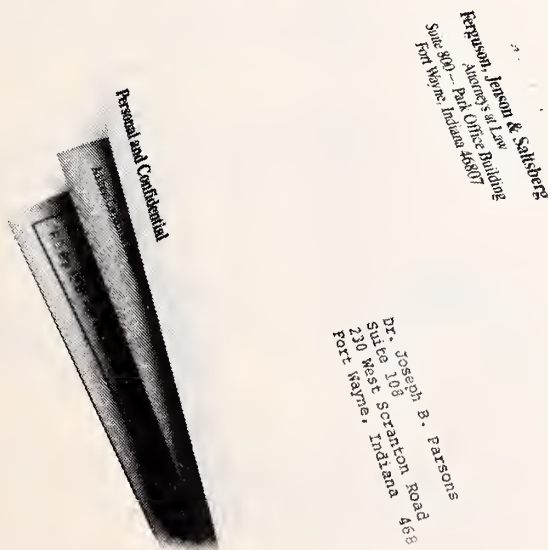
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In part, the legislative program we've outlined would:

- Effect major Medicaid reform to provide uniform adequate benefits to all persons below the poverty level.
- Require all employers to provide health insurance coverage to all full-time employees and their families.
- Create risk pools in all states to make coverage available for the medically uninsurable and others for whom individual health insurance policies are too expensive and group coverage is unavailable.
- Correct the financial inadequacies of Medicare by establishing a prefunded, actuarially sound system enabling all elderly people to buy the qualified health insurance plan of their choice.
- Develop a long-term care financing system involving public and private partnerships.
- Enact professional liability reform essential to reducing inordinate costs attributable to liability insurance and defensive medicine.

I'm sure you will agree that these are worth-

while goals for the AMA to pursue, and that the AMA, working with its members, is the proper organization to help coordinate efforts to reach these goals. You recognize that the AMA's success in improving America's healthcare system would have a significant impact on how you will be practicing medicine in the years ahead.

The Kansas Medical Society does a superb job of representing the interests of Kansas physicians in all areas of concern, including the House of Delegates. You should be justly proud of your accomplishments.

But nationally, we must rely on the AMA to work, in cooperation with you, to pursue objectives that are beyond the reach of state associations such as the Kansas Medical Society and the other unified states including the Pennsylvania Medical Society, which voted to become a unified group, effective last January 1.

The only practical way of providing this vital, needed support — both moral and financial — is through your continued unified membership.

If ever there was a time when the AMA needed your support, it's now.

AMA/NET Simplifies the Task of Keeping Up

With AMA/NET, the on-line medical information network sponsored by the AMA, it's easy to keep up with the latest clinical and biomedical literature, health care business information and medical news. You can access the information you need . . . when you need it . . . with just your computer, a modem and your phone. No computer expertise required!

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- Public Information Services
Sources include CDC, the Surgeon General and NLM/NIH.

ELECTRONIC COMMUNICATIONS

PROFESSIONAL PROGRAMS

- **DXplain™** — A new medical resource to expand the physician's diagnostic considerations. From the Massachusetts General Hospital (MGH).
- **MEDICOM® Drug Interaction Database** — The only on-line, generic ingredient-based drug interaction database. From Professional Drug Systems, Inc.
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AMA/NET is sponsored by the American Medical Association and is a service of SoftSearch, Inc. and American Medical Computing, Ltd., a subsidiary of the AMA.





LICENSE RENEWALS TO BE MAILED IN MAY

During the first week of May, the Board of Healing Arts will mail license renewals to all currently licensed Kansas physicians. The renewals will be sent to the mailing address most recently reported to the Board. Physicians who have since moved should immediately notify the Board in writing.

In addition to active status, the following licenses are offered and may be selected as current needs dictate:

- * Inactive. For licensees not residing in Kansas, and not rendering any professional services in Kansas. Malpractice insurance coverage and CME hours need not be maintained.
- * Federal Active. For licensees who are in the military service of the United States and/or employed by the federal government. No private practice outside federal employment is allowed in the State of Kansas. CME is required (see the License Status Form for details).
- * Exempt. For licensees who do administrative work, provide gratuitous services or prescribe only to themselves, their immediate family and friends at no charge, and who do not maintain a regular Kansas practice or practice location. Malpractice insurance coverage and CME are not required. See the License Status Form accompanying the renewal form for details.

Licensees who have an exempt, inactive or federal active status with the Board must complete a License Status Form, which will be included with the renewal. If you desire conversion to exempt status, you should request an exempt license application form from the Board.

To continue to be licensed in Kansas, you must fully complete the renewal application, remit the renewal fee and provide all required documentation. If you actively practice in Kansas, you must provide evidence of professional liability insurance. Also, the date in the upper right corner of your mailing label indicates the year you must submit evidence of satisfactory completion of continuing education, as explained in the renewal notice. (If "90" appears on the label, the continuing education form must be completed for renewal this year.) Renewals which do not meet these requirements will be rejected and returned without renewal until the requirements are met.

The fee for renewal prior to June 30, 1990 is \$150. For renewals mailed after June 30, the fee will be \$200. Renewals mailed after July 30 will be cancelled, and the license will have to be reinstated. Continued practice in Kansas after cancellation of a license will subject you to disciplinary action by the Board and will also jeopardize coverage by your

professional liability insurance carrier and your ability to receive payments from your patients' health insurance carriers.

The Board is currently changing computer systems, so processing of renewals and mailing of receipt cards may be delayed. The Board requests your patience. Please note that the new address for the Board of Healing Arts is 235 S. Topeka Boulevard, Topeka, Kansas 66603.

REQUESTING PROFILES FROM KFMC

The third scope of work requires the PRO to review all selected cases for quality and to assign levels of severity to cases with confirmed quality problems. Current regulations do not permit the PRO to notify physicians of Level I quality problems until a pattern has developed (three or more problems within a calendar quarter, or five Level I quality problems identified within two consecutive quarters).

It is important that attending physicians have the opportunity to be informed of any findings to allow for clarification and provision of additional information. Therefore, all physicians are encouraged to contact the KFMC on a regular basis to request a copy of their individual profile. Call 913-273-2552, or write Kansas Foundation for Medical Care, 2947 SW Wanamaker Drive, Topeka, Kansas 66614.

PROPER STORAGE OF PRESCRIPTION MEDICINES IS VITAL

Patients who are taking carbamazepine (Tegretol) or nitroglycerine should be cautioned about improper storage of their medications. Decorative pill boxes and similar containers should not be used to store nitroglycerine, which needs to be kept in an airtight container, such as the bottle in which it comes from the pharmacy, in order to maintain its potency. Carbamazepine, which must dissolve at a predictable rate, is adversely affected in this regard by humidity. It should be stored in a cool, dry place.

DISCREPANCIES REPORTED IN TEST RESULTS FOR LYME DISEASE

A 1989 study of Lyme disease tests performed in New Jersey shows notable discrepancies in test results, which have "many implications for the diagnosis of Lyme disease and for future research in this field," according to the authors of the study.

In the study, blood collected from 132 outdoor workers was sent to four independent facilities for analysis. All study participants had at least two tests; some had three or four blood samples taken. Two laboratories performed indirect fluorescent antibody (IFA) tests, and two used ELISA tests. Only a "low to moderate" level of agreement existed among the four labs' results, according to the researchers, and they add that results from different samples sent to the same lab also showed similar discrepancies.

Several reasons exist for the variances, according to the study's authors. They include:

- * Nonstandardized tests;
- * Low reliability of tests administered within a month of the first symptoms of Lyme disease;

- * Several different methods used to prepare serum samples; and
- * "Subjective" interpretation of the IFA test results, which can result in disagreements even within one lab.

OLIVE OIL APPEARS TO LOWER CHOLESTEROL

Fanciers of Italian food now have an even more compelling reason to partake of it: a new study of olive oil and other monounsaturated fats suggests that they not only lower cholesterol, but also significantly lower systolic blood pressure and blood glucose levels. The study, published in JAMA, also found that the more butter and margarine men and women use, the higher their blood pressure and cholesterol levels are.

The study sample consisted of 4,903 Italian men and women from 20 to 59 years of age, who live in various regions of Italy. About half of the participants said they do not use butter. Instead, they cook with polyunsaturated fats such as corn, soybean, sunflower and mixed vegetable oils, and use olive oil on food after it is prepared.

In both men and women, the more butter and margarine used, the higher the levels of blood glucose detected. But for those who used olive oil instead, the opposite was true. Not only did their blood glucose levels drop, but so did their blood pressure and cholesterol levels. "In particular, with regard to olive oil, our findings confirm a hypothesis of a negative association between this oil and serum cholesterol levels and support the hypothesis that olive oil may have beneficial effects on blood pressure and blood glucose levels," the authors wrote.

The AMA Council on Scientific Affairs estimates 15 to 20% of Americans' daily energy intake comes from saturated fatty acids in animal products and tropical oils.

ON BEING RETIRED

This month KANSAS MEDICINE introduces a new column about the lifestyles of our retired physicians. Called "The Days of Our Age," the column is written by retired KMS members. This month Dr. David Laury writes about his new home in Georgia and his part-time work in a military clinic. (See page 107.) KANSAS MEDICINE welcomes submissions for "The Days of Our Age." Please send your story to Susan Ward, Kansas Medicine, 1300 Topeka Avenue, Topeka, Kansas 66612.

POPULATION CHANGES IN THE 80S ARE REVEALED BY CENSUS

For the first time since the first decade of this century, during the 1980s the number of men in America grew faster than the number of women, according to the Census Bureau. Death rates for men declined more rapidly than for women, extending male lifespans. Cancer deaths increased for women, apparently due to increased smoking, but declined for men. Declines in deaths from heart disease and cerebrovascular disease occurred for both sexes during the decade, but the declines were smaller for women than for men.

Life expectancy for men increased from 70.9 years in 1982 to 71.5 in 1987, a six-tenths of a year gain. But for women the increase in life expectancy during the same period increased

only one-tenth of a year, from 78.2 to 78.3. Notwithstanding the trends, women still outnumber men in the U.S. by 6 million

HOTLINE IS AVAILABLE FOR AMA MEMBERS

Don't forget the toll-free AMA member hotline, which may be used for quicker service when you want to order AMA publications, report an address change, register for a conference, ask about your JAMA subscription, clarify your membership status, register an opinion or complaint, etc. The member hotline is 1-800-AMA-3211.

NATIONAL NURSES' DAY

National Nurses' Day pays tribute to the nursing profession's vital contribution to mankind in providing health care services. It is observed annually on May 6, which this year falls on Sunday.

CONGRATULATIONS...

To Larry R. Anderson, M.D., Wellington, who has been named Kansas Family Doctor of the Year by the Kansas Academy of Family Physicians.

And to James G. Price, M.D., Kansas City, who has been named Dean Designate of the University of Kansas School of Medicine--Kansas City. He succeeds Martin Pernoll, M.D., who resigned.

CALL FOR ABSTRACTS

The Society of Critical Care Medicine has issued a call for abstracts. The abstracts will be considered for author participation in a consensus conference entitled "Fostering Humanism in Critical Care," to be held in September. Papers will be published in the journal Critical Care Medicine. Abstracts must address one of the following questions: How can we foster humanism among caregivers; How can we bring out the best in patients and families; or How can we provide more humane unit structure and design? The deadline for the submission of abstracts is July 9, 1990. For full details, call 714-870-5243.

NEW AMA PUBLICATION ON INCORPORATION

A Physician's Guide to Professional Corporations, published by the AMA, can help you to decide if it makes sense for your practice to be incorporated. The book discusses the pros and cons and the legal and tax implications of incorporation. The book, publication number OP 378289, costs \$18 for AMA members and may be ordered by phone. Call 1-800-621-8335, or try out the member hotline (see above).

LET'S HEAR IT FOR SCIENCE IN THE PUBLIC INTEREST!

Are you trying to add more fiber to your diet, but finding it hard to love bran cereals? Well, relax and read on. Here's some good news from the Center for Science in the Public Interest. A serving of Pritikin Navy Bean Soup has twice as much fiber as a serving of Kellogg's All-Bran cereal. The highest-fiber vegetable is a baked potato with skin. (There's no fiber in the sour cream, though!) Tortilla chips have more than three times as much fiber as potato chips. And now for the best news of all: a Nature Valley Granola Bar has less fiber than a Snickers candy bar!

Tell us where it hurts.

Retirement planning shouldn't be painful . . . but if you're like most physicians, treating your own financial symptoms can be difficult and time-consuming. Knowing your options and opportunities for retirement . . . and then choosing the right plan and funding vehicles are never easy. *And now changes in the tax law require that every existing retirement plan be updated to ensure its continued tax-qualified status.* The wrong choice can really hurt your future.

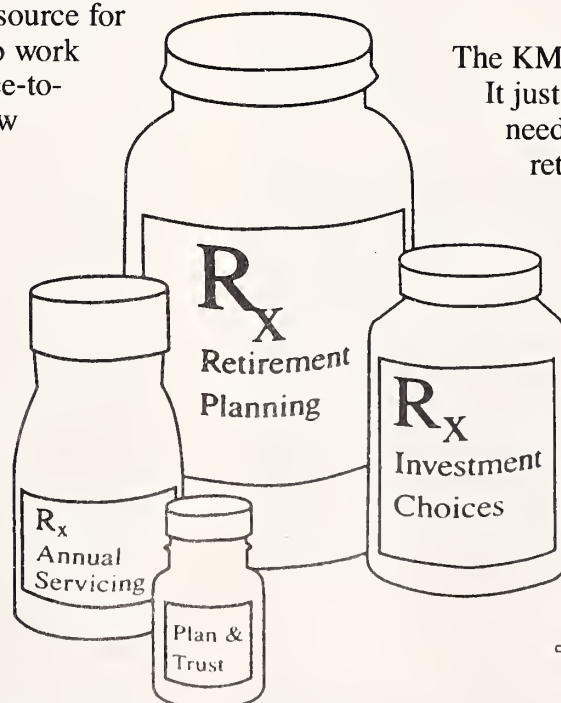
We just might have a cure. The KMS Retirement Program, specially designed for the members of the Kansas Medical Society by the firm of Cohen, Curtis and Associates, Inc., which has decades of experience in counseling physicians to identify and meet their retirement plan objectives, offers:

- Individual consultation on your objectives, helping you evaluate your existing retirement plan or choose a new one
- A prototype retirement plan . . . designed especially for the Kansas Medical Society and made available through KMS Services, Inc.
- Customized retirement planning . . . we'll design, implement, and administer it
- Simple documentation support . . . efficient administration . . . and ongoing service
- Access to diversified investment products that best fit your needs

Cohen, Curtis and Associates, the recommended retirement planning source for members of KMS, is ready to work with you, one-on-one and face-to-face. We can help you see how flexible your retirement plan can be, helping you choose from a wide range of services and products, whether your practice is organized as a corporation, partnership, or sole proprietorship.

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Urological Dysfunction and Psychiatric Disturbances Due to Multiple Sclerosis

KARL G. SIEG, M.D.,* AND GLENN O. BAIR, M.D.†

Multiple sclerosis (MS) is a demyelinating illness characterized by exacerbations and remissions due to progressive lesions in the white matter of the brain and the spinal cord.¹ It represents a major disability in young adults, leading to a wide array of neurologic dysfunctions via impaired impulse transmission particularly noted with inflammation. Neurological impairments include paresis, sensory disturbances, ataxia, ocular impairments, mental disturbances, bladder problems and sexual dysfunction. Perineal pain, sexual dysfunction or mental disturbances are often the most outstanding complaints.

Urological problems are due to lesions in the spinal cord causing a plethora of functional disabilities in up to 80% of MS patients.^{2,3} Irritative bladder symptoms such as urgency, urge incontinence and frequency are present in approximately 60% of patients, while obstructive symptoms such as hesitancy, post-void dribbling and retention manifest in one-quarter to one-third of individuals with MS.^{3,4} Affected patients may have frequent small and precipitous urination with incontinence during sleep or sexual intercourse. Subjects ultimately can develop urinary retention and increasing incontinence which requires continuous catheterization.

Sexual impairment, with or without bladder dysfunction, affects over 90% of men and over 70% of women with MS.⁵ Men report poor genital sensation, problems with achieving and maintaining an erection and premature or retrograde ejaculation. They also have reduced fertility, partly because of the sexual response impairment and also because the spinal cord lesions lead to abnormally low sperm production. These physical changes can, in turn, interfere with sexual expression and desire. Unfortunately, individuals with dysfunctional sexual performance are often in-

appropriately labeled as having only a psychogenic condition. The physician must be aware that organic illness may present with a confusing array of symptoms, including psychological problems.

The following is a case description of a patient who had a long history of pain in his sexual organs that had been ignored in favor of an exclusive psychogenic diagnosis. Ignoring the investigation of his complaints prevented and deferred an accurate diagnosis of his basic neurological disease: multiple sclerosis. Meanwhile, postponement of the diagnosis led to severe psychiatric disturbances, and he was labelled as being a routinely mentally disturbed person.

Case History

An 18-year-old single male student began having problems with generalized fatigue and consulted his family physician. He also complained of inability to have successful masturbation due to problems achieving an erection and full ejaculation. Approximately one year after the onset of these problems, he was referred to a urologist for diagnosis and treatment of associated lower abdominal pains. He complained of frequency of urination and urgency and was diagnosed by the urologist as having a "psychophysiologic" problem. He went to a university health clinic psychiatrist, where he was noted to be tense, suspicious and preoccupied with body pain.

At age 19, he complained to the psychiatrist of continued ongoing fatigue, chronic shyness, social isolation and anxiety. During that (successful) academic year, he was initially treated with perphenazine (Trilafon) and benztropine (Cogentin), which resulted in episodes of tremulousness. These medications were discontinued, and diazepam (Valium) was used briefly. The lower abdominal pain continued during this period of time, and he experienced a tingling sensation in his penis. His perineal complaints lasted episodically for several weeks at a time.

Medical attention was next sought at age 22 for increasing anxiety, restlessness, somnolence

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Address correspondence and reprint requests to Dr. Sieg, University of Kansas Medical Center, 39th & Rainbow Boulevard, Kansas City, Kansas 66103.

and additional physical complaints. He had difficulty with concentration and complained of headaches and twitching in his right arm. He had burning sensations all over his head, problems with painful masturbation, and pain within the pelvis, especially in the perineum. His previous bladder sphincter problems returned. An x-ray of the pelvis was obtained and was unremarkable. His psychiatrist felt that these problems occurred on an "emotional basis" and did not represent a physical problem. He was treated with thioridazine (Mellaril) without improvement. He continued to have problems with concentration and subsequently dropped out of school, as his poor academic performance no longer allowed him to function adequately.

Two years later, at age 24, he was hospitalized with suicidal ideation and depression. He presented with insomnia, poor concentration, fatigue and a severely depressed affect. There had been a suicide attempt in the previous year. He said the intense pain in his groin made him want to die. He was preoccupied with pain on urination, "weird" body sensations, and inadequate and painful masturbation. The evaluating psychiatrist felt he was paranoid, severely depressed and schizoid, and displayed multiple dependent personality traits. The depression and disorganized thinking reportedly reached psychotic proportions. Electroconvulsive therapy was instituted, and there was a recorded improvement in the psychosis. However, the patient continued to be preoccupied with sexual function and particularly with ongoing perineal pain. Two months after admission, he was discharged on antipsychotic and antidepressant medications.

One year later, he was hospitalized again. This time his problems included decreased concentration, anhedonia, severe insomnia, lack of self-esteem, inability to relate to others and negativism. He reported "strange thoughts of a sexual nature that caused him to be depressed" and was given a diagnosis of schizophrenia. He complained of sexual dysfunction with genital pain and was examined using cystoscopy. Problems with bladder sphincter spasticity were noted. This was the first serious effort to investigate the organicity of his seven-year perineal pain problem. He was given oxybutynin (Ditropan), which markedly reduced insomnia, bladder spasm and, to some extent, the genital pains.

When seen at the age of 26, his primary complaints were failure to ejaculate on masturbation and feeling severely depressed and anxious. He

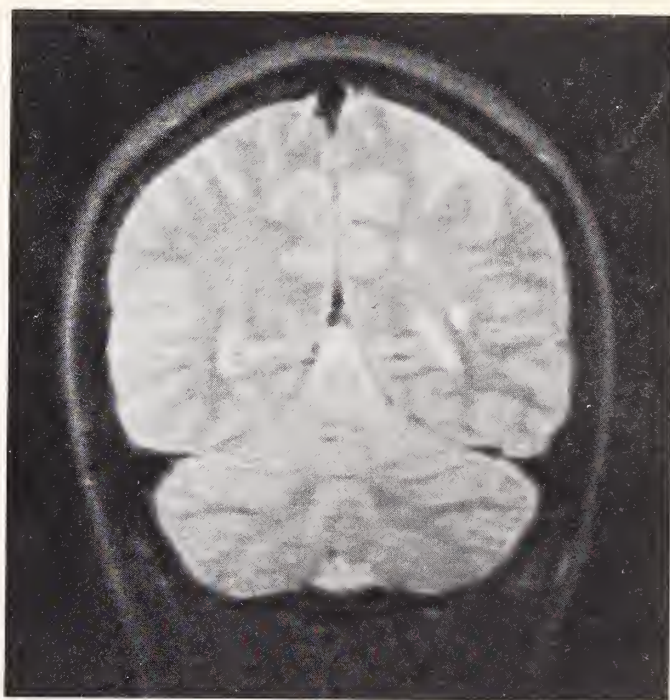


Figure 1. T₂-weighted coronal section demonstrating two high-intensity white matter lesions in the left parietal cortex.

had been helped by the oxybutynin, but still had problems with urgency on urination. He also described sharp, burning pain in his penis and sharp pains in the perineum. Antidepressant and antipsychotic medications had not helped him in the past; physical examination at this time indicated an area of dysesthesia consistent with S1, 2, 3 peripheral neuropathy. He underwent a myelogram, and the spinal fluid showed a protein elevation of 81mg/dL. T₂-weighted MRI head scan demonstrated two high-intensity white matter lesions in the left posterior parietal cortex consistent with a diagnosis of MS (Figure 1). Other CSF studies were unremarkable, including myelin basic protein and oligoclonal bands. His EEG was unremarkable, and evoked potential studies were unremarkable for specific visual or auditory dysfunction.

The patient was examined at another institution several months later for further evaluation of similar ongoing physical and psychiatric complaints. This neurological examination also revealed internuclear ophthalmoplegia clinically consistent with a diagnosis of multiple sclerosis. His mental status examination was remarkable for poor concentration and short-term memory, dysphoria with insomnia, poverty of thought content with words of indefinite reference, poor left-right discrimination, pressured speech and suicidal ideations. Follow-up MRI again revealed pa-

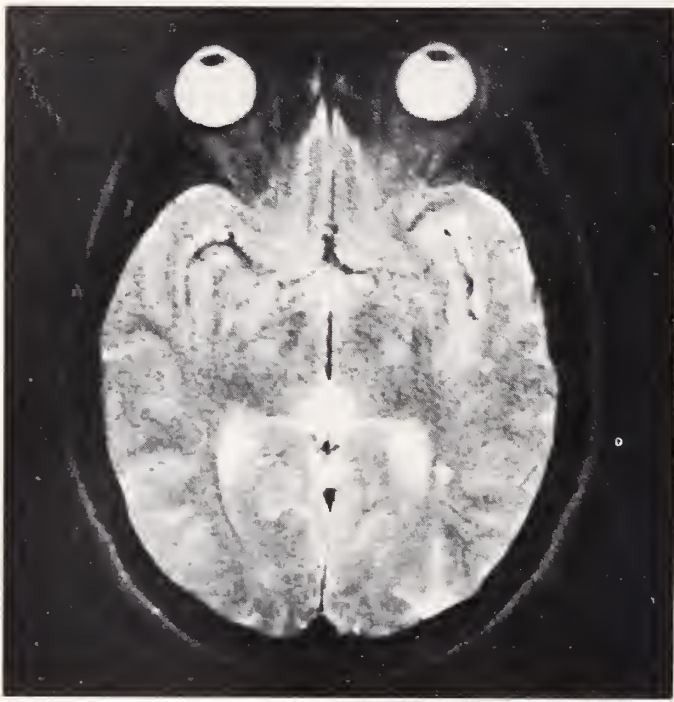


Figure 2. T₂-weighted cross-sectional view demonstrating a high-intensity white matter lesion in the left parietal cortex.

thology in the left parietal cortex consistent with MS (Figure 2). CSF protein was elevated at 97mg/dL. No oligoclonal bands were seen, and normal myelin basic protein was found. T4, TSH, B12 and folate were unremarkable. Other unremarkable laboratory examinations included CBC, chemistry profile, ANA, VDRL, HIV and rheumatoid factor. The patient refused neuropsychological testing and urologic evaluation. His suicidal ideations resolved during the hospitalization, but he refused further evaluation and eventually discharged himself against medical advice.

Discussion

This report describes a patient with longstanding perineal pain and associated sexual and bladder dysfunction. For seven years, medical evaluation did not include serious consideration of an organic basis for his problems. The overall collection of positive findings is compatible with organic involvement in this patient's neuropsychological functioning, and these findings during the longitudinal course meet the diagnostic criteria for "clinically definite multiple sclerosis."⁶ He also had serious psychiatric disturbances that could possibly be related to the stressful circumstances of his disease, although psychiatric illness in MS patients often results from the lesions themselves.⁷ The additional difficulties with left-right discrim-

ination and propositional speech are consistent with left parietal disease⁸ and perhaps contributed to his inability to communicate fully the symptoms of his physical problems.

Changes in this patient led him to present himself as being in a poorly functioning state. His most recent presentations were demanding, dramatic and sometimes even hysterical. Associations between hysteria and MS have long been recognized.⁹ It is not uncommon to see hysterical symptoms in association with an organic syndrome; often they are harbingers of a disease as yet undiagnosed.¹⁰

The presentation of various and sometimes vague physical symptoms in the presence of psychiatric disability should lead to a thorough search for an organic cause of such symptoms. The onset of this patient's psychiatric symptomatology was perceived by his doctors as the dominant diagnosis to explain his pelvic pain and other physical complaints. The eventual in-depth search for organic disease finally led to several significant objective findings which support the diagnosis of multiple sclerosis. MS may present with unusual symptoms, and this case illustrates how difficult it sometimes can be to make the correct diagnosis.

REFERENCES

1. Poser CM. Exacerbations, activity, and progression in multiple sclerosis. *Arch Neurol*, 1980;37:471-74.
2. Bradley WE, Logothetis JL, Timm GW. Cystometric and sphincter abnormalities in multiple sclerosis. *Neurology*, 1973;23:1131-39.
3. Miller H, Simpson CA, Yeates WK. Bladder dysfunction in multiple sclerosis. *Brit Med J*, 1965;1:1265-69.
4. Andersen JT, Bradley WE. Abnormalities of detrusor and sphincter function in multiple sclerosis. *Brit J Urol*, 1976;48:193-98.
5. Harowski K, Harris L, Nager E, Schapiro RT. Sexuality. In RT Schapiro, ed., *Symptom Management in Multiple Sclerosis* (New York: Demos, 1987), pp 43-47.
6. McDonald WI, Halliday AM. Diagnosis and classification of multiple sclerosis. *Br Med Bull*, 1977;33:4-8.
7. Petersen RC, Kokmen E. Cognitive and psychiatric abnormalities in multiple sclerosis. *Mayo Clin Proc*, 1989;64:657-63.
8. Benson DF. Neurologic correlates of anomia. In H Whitaker and HA Whitaker, eds., *Studies in Neurolinguistics*, vol 4 (New York: Academic Press, 1979), pp 293-328.
9. Brain WR. Critical review: Disseminated sclerosis. *Q J Med*, 1930;23:343-91.
10. Merskey H, Buhrich NA. Hysteria and organic brain disease. *Br J Med Psychol*, 1975;48:359-66.

Pleural Sarcoidosis with Massive Effusion and Lung Entrapment

RICHARD A. CLAIBORNE, M.D.,* AND GERALD R. KERBY, M.D.†

Pleural involvement with sarcoidosis is a rare, but well documented, manifestation of the disease.¹ However, pleural involvement is usually not the major finding in patients presenting with sarcoidosis and rarely causes significant clinical problems.^{2, 3, 4} The following case presents massive involvement of the pleura with no signs of systemic disease and resultant entrapment of the lung, due to a large pleural peel.

Case Report

A 30-year-old black male presented in February 1987 with complaints of dyspnea on exertion, night sweats and malaise. Intermittent fever, left pleuritic chest pain and 20 pounds of weight loss were noted. Ten years previously, his wife had received one year of isoniazid prophylaxis. He was previously healthy. He had smoked a pipe for five years, but had quit recently, due to shortness of breath. His work and family history were unremarkable.

Physical examination was remarkable for a temperature of 99.6°F, and a chronically ill-appearing, slender black male. His chest exam revealed absent breath sounds in the left chest with dullness to percussion. The chest x-ray revealed a massive left pleural effusion/reaction with equivocal right hilar adenopathy (Figure 1). Laboratory results at this initial evaluation were normal.

The pleural space was drained of 850ml of cloudy, straw-colored fluid. Five pleural biopsies were also obtained. The biopsy and thoracentesis needles met with resistance for 6cm before free fluid was found. The following pleural fluid lab results were obtained: LDH 222 IU/L, total protein 5.6 mg/dL, glu 54 mg/dL, WBC 110 cells/mm³, RBC 3070 cells/mm³, with a differential of 72% lymphocytes, 27% large mononuclears and 1% eosinophils. Multiple small, noncaseating

granulomas containing multinucleated giant cells, epithelioid histiocytes, lymphocytes and plasma cells were seen on pleural biopsy (Figure 2). No organisms were seen using stains for acid-fast bacilli and fungi.

Isoniazid and rifampin were started at 300 mg and 600 mg, respectively, on a daily basis. A PPD skin test and sputum examinations were negative. There was some mild radiographic improvement (Figure 3), but the patient's symptoms remained unchanged. All specimens collected were negative at two months for any mycobacterial growth. Repeat spirometry done in July of 1987 continued to reveal severe restrictive disease (Table 1). In July the patient underwent a left thoracotomy for decortication. A large cortical peel surrounding almost the entire left lower lobe and one-half of the left upper lobe 1cm thick, and excluding the diaphragm, was observed. It was white and appeared to be studded with "rice-grain material." No fluid was found. Measurements at the time

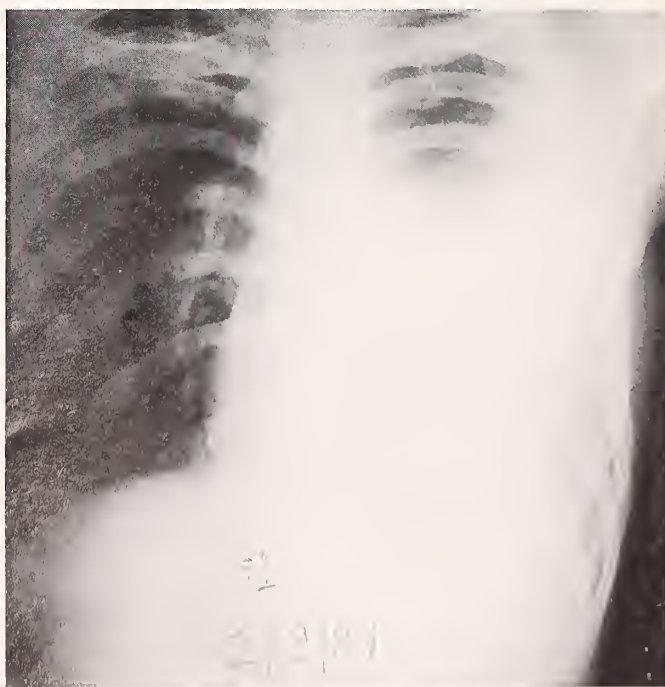


Figure 1. Initial chest roentgenogram with massive left pleural involvement.

*UKSM-Wichita and HCA Wesley Hospital, Wichita.

†Division of Pulmonary and Critical Care, KUMC-KC.

Address correspondence and reprint requests to Dr. Claiborne at 3243 E. Murdock, Suite 500, Wichita, Kansas 67208.

TABLE 1
PULMONARY FUNCTION TEST RESULTS

Date	2/87	7/87	9/87	11/87
Clinical Status	Baseline	Pre-thoracotomy	Post-thoracotomy	Post-steroids
FVC/% Predicted	2.06/36	2.14/37	2.70/47	4.94/85
FEV1/% Predicted	1.58/35	1.61/36	2.14/48	4.02/90
TLC/% Predicted		NOT	4.60/59	7.20/92
D _{co} /% Predicted		PERFORMED	38	70

of resection were a mean diameter of 8cm and average thickness of 0.3cm. The cortical peel was of the same histological pattern as the pleural biopsies done in February. Following decortication, there was some radiographic and spirometric improvement in August (Figure 4 and Table 1).

Given his failure to respond to an antituberculosis regimen, negative cultures, negative PPD and signs of parenchymal lung disease, the patient was started on prednisone, 60mg daily. In November 1987 he was asymptomatic and had marked resolution of his radiographic finding (Figure 5), as well as a return to normal of his pulmonary function parameters (Table 1). He was then lost to follow-up.

Discussion

This case is presented for four separate reasons.

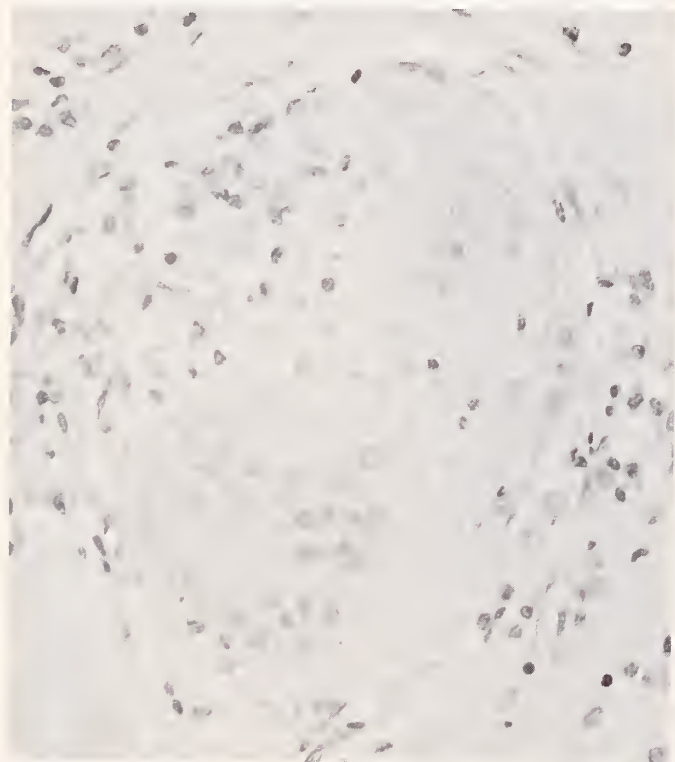


Figure 2. Pleural biopsy specimen showing noncaseating granulomas containing multinucleated giant cells.

First is the massive size of the effusion and granulomatous involvement, which has been briefly described. Second is the lack of multisystem involvement. The third reason is the marked pleural peel with demonstrated spirometric improvement after resection. And finally, the combination of the above may result in a misdiagnosis of tuberculosis.

Five previous cases have been recorded that presented with massive effusions which proved to be due to sarcoidosis.⁵ The real concern in these cases appears to be whether tuberculosis was causing the effusion. Two of the cases presented by Kanada et al. were treated for tuberculosis initially, although outside the United States, and were later diagnosed correctly after failure of antituberculosis treatment.⁵

Usually patients with pleural involvement present with known multisystem sarcoidosis. Chusid

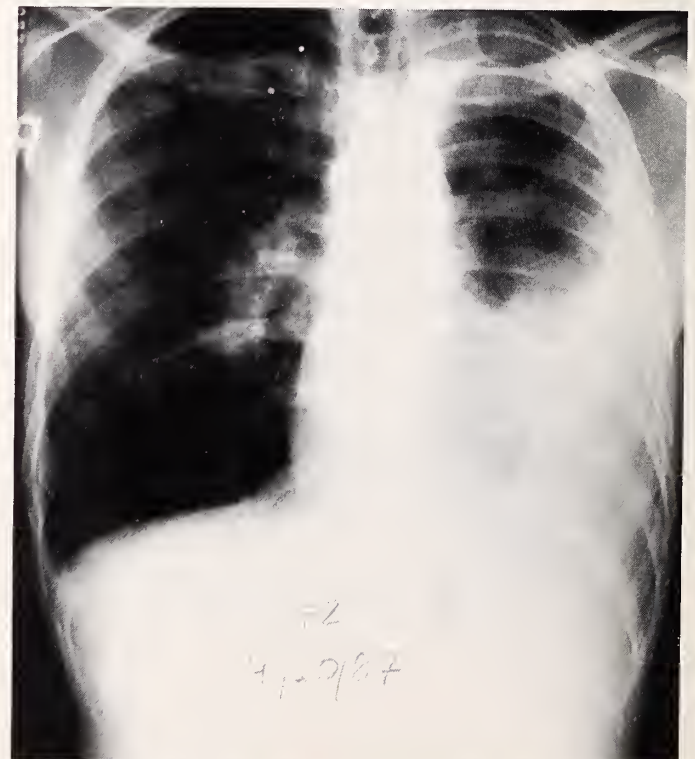


Figure 3. Chest roentgenogram after two months of treatment for tuberculosis.

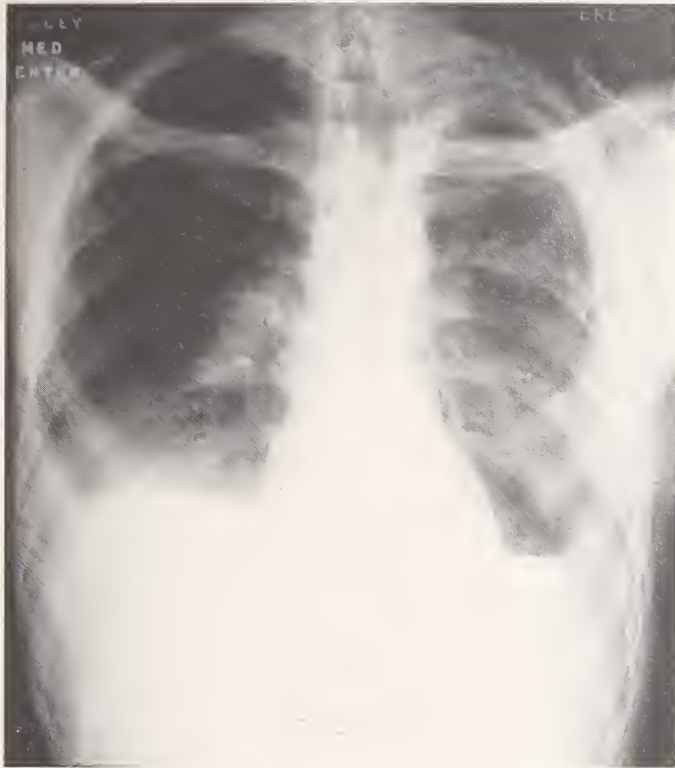


Figure 4. Chest roentgenogram after decortication.

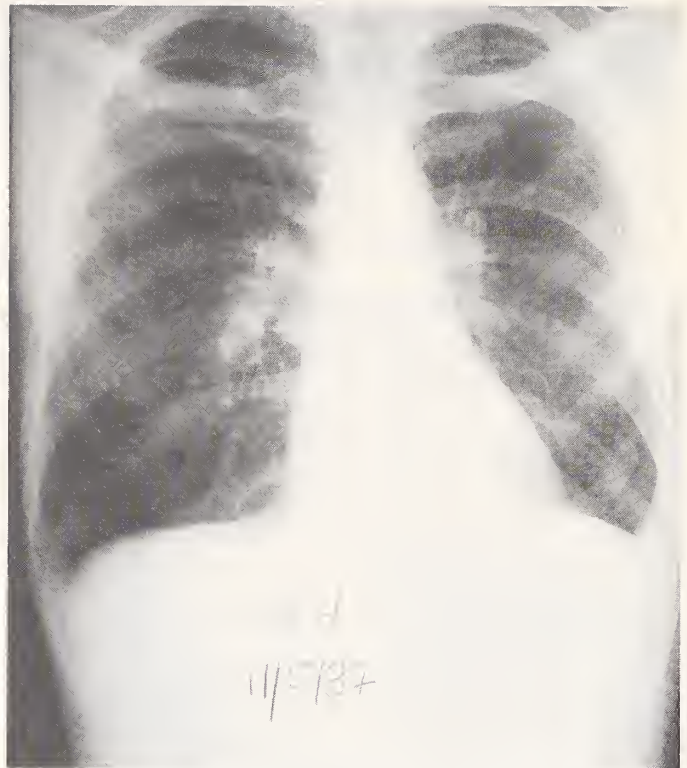


Figure 5. Chest roentgenogram after treatment with steroids.

and Siltzbach described 7 patients out of 950 with sarcoidosis who presented with some type of pleural involvement. All 7 patients were noted to have extensive pulmonary involvement, as well as extrathoracic manifestations.² Wilen et al. presented 27 patients with pleural involvement out of 227 patients with sarcoidosis. They concluded that when present, pleural involvement caused by sarcoidosis was always associated with diffuse lung involvement.³ Sharma describes one patient with only pleural effusion as an initial presentation in the absence of other x-ray findings, but this patient developed bilateral hilar adenopathy six months later.⁶

No report demonstrates improvement of restrictive disease after decortication because of sarcoidosis, although one patient of Kanada et al. underwent decortication.⁴ The peel was so extensive in our patient that there was a definite improvement after removal. But his ultimate improvement should be attributed to the treatment with steroids, which helped resolve the paren-

chymal disease and any pleural disease which remained (Table 1).

In summary, the important points of this case are that, although unusual sarcoidosis should be considered in a massive pleural effusion, even if there is little parenchymal or hilar involvement, the pleural peel may be extensive and contribute to restriction of the lung; and that the diagnosis may be easily confused with tuberculosis.

REFERENCES

1. Rockoff SD, Rohatgi PK. Unusual manifestations of thoracic sarcoidosis. *AJR* 1985;144:513-28.
2. Chusid EL, Siltzbach LE. Sarcoidosis of the pleura. *Ann Intern Med* 1974;81:190-94.
3. Wilen SB, Rabinowitz JG, Ulreich JG, Lyons HA. Pleural involvement in sarcoidosis. *Am J Med* 1974;57:200-9.
4. Sharma OP, Gordonson J. Pleural effusion in sarcoidosis: A report of six cases. *Thorax* 1975;30:95-101.
5. Kanada DJ, Scott P, Sharma OP. Unusual presentations of pleural sarcoidosis. *Br J Dis Chest* 1980;74:203-5.
6. Sharma OP. *Sarcoidosis: Unusual pulmonary manifestations*. *Postgrad Med J* 1977;61:67-73.

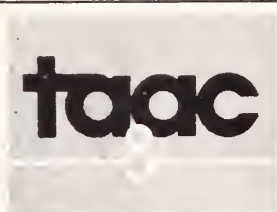
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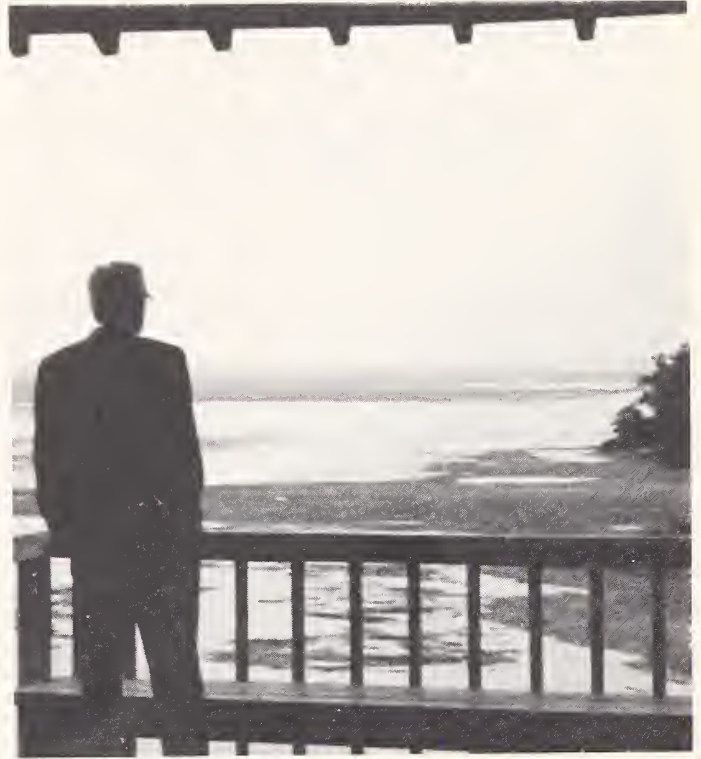
DAVID G. LAURY, M.D.*

The following article is the first in what we hope will be an ongoing series describing the various lifestyles enjoyed by our retired physicians. Let your fellow KMS members know what life is like now that you have retired. Do you enjoy your new lifestyle? What do you do for recreation? Do you have a new career? Is your health good? Did you plan adequately for your retirement? How? What would you do differently if you were planning now to retire? Any of these subjects, plus many more, are fair game for this column. Send us your thoughts today!

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For retirees who want to practice part-time, the answer has been found here in the military. The Department of Defense has contracted with HMOs and other medical service organizations



Dr. Laury admires the view at low tide from a lookout tower on Skidaway Island.

to operate walk-in clinics around the country in areas where the concentration of military retirees and dependents is heavy. The one where I work is called PRIMUS and is staffed by full- and part-time civilian doctors. Board-certified family practitioners and pediatricians are preferred. One can work from four to 40 hours per week, according to preference. The HMO pays a generous hourly wage and covers all expenses, including malpractice insurance. A state license is required.

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Should Angioplasty Be Deferred after Infarction?

DONALD L. VINE, M.D.,* *Wichita*

The routine use of coronary angiography and angioplasty for the treatment of acute myocardial infarction is seriously questioned by a series of four studies comparing early angioplasty with alternative strategies.

Four Randomized Trials

Topal and colleagues screened 500 patients and randomized 99 to immediate coronary dilatation (PTCA) and 98 to PTCA after seven days (TAMI).¹ Angiography was performed before randomization, and patients with total obstructions or diffuse three-vessel disease were excluded. Sixteen patients assigned to deferred angioplasty required emergency intervention, and 20 of the remainder no longer required angioplasty at seven days because of significant improvement in the obstruction.

The European Cooperative Study Group (ECSG) randomized 367 patients prior to angiography into a group of 183 patients to receive immediate angiography and PTCA, and a group of 184 patients for whom angiography would be performed only if clinically required.² Seven of the patients assigned to aggressive therapy had severe congestive failure or shock, in contrast to only one of the patients assigned to conservative management. Twelve percent of the patients assigned to conservative management required PTCA.

The TIMI IIA trial randomized 389 patients to undergo immediate angioplasty or to wait 48 hours.³ Twenty-eight percent of the patients assigned immediate angioplasty and 45% of those assigned to delayed intervention did not undergo angioplasty.

The TIMI IIB trial is the largest and most recent of these comparisons. Immediate thrombolysis followed by delayed angioplasty was compared to thrombolysis alone in a randomized series

of 3,262 patients following acute myocardial infarction.⁴ One-third of the patients initially assigned to conservative management underwent angiography for recurrent ischemia, and 41% of these underwent PTCA. Of the patients initially assigned to early PTCA, 758, or 46%, did not actually undergo angioplasty. Of the early deaths among patients assigned invasive management, 30 of 38 occurred prior to any intervention.

Thrombolytic Therapy

All patients enrolled in these trials received heparin, aspirin and tissue plasminogen activator. Most patients received 100 mg rt-PA, but the TAMI trial used 150 mg and the initial patients in the TIMI IIB trial received 150 mg. None of these trials compared streptokinase to PTCA, and it remains unknown whether or not similar results would have been obtained.

Mortality

The major endpoint of each trial is mortality, although other outcomes, such as bleeding, repeat PTCA and the need for coronary bypass grafting,

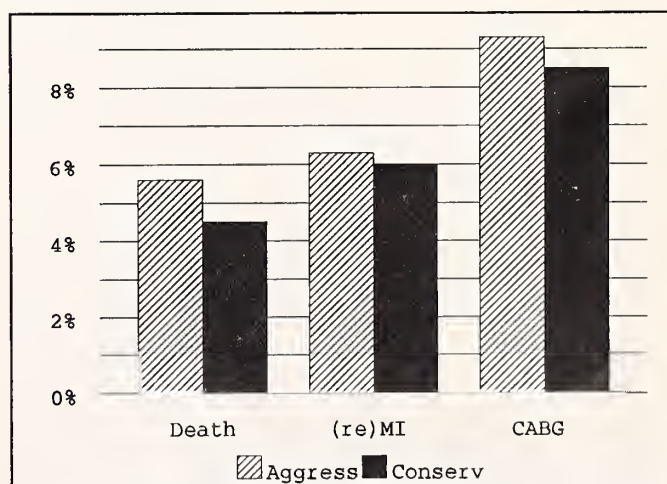
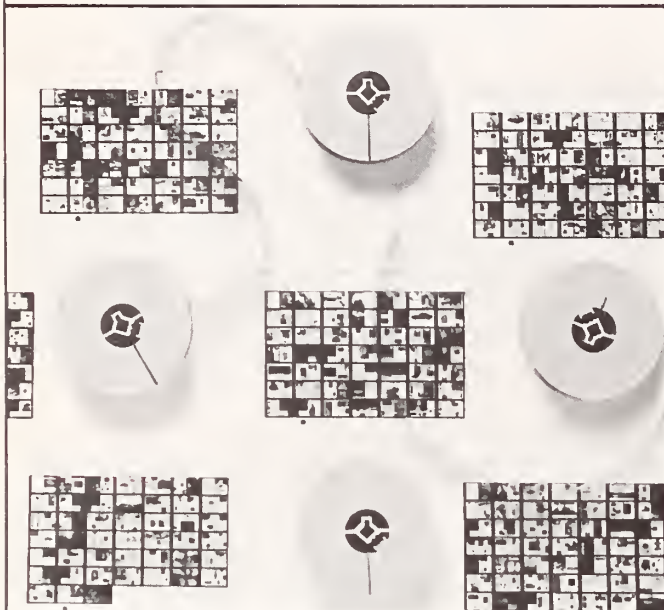


Figure 1. Results of immediate versus deferred PTCA: four-study outcome. Abbreviations: (re)MI = recurrent infarction, PTCA = coronary angioplasty, CABG = coronary bypass grafting, Aggress = early or immediate angioplasty, Conserv = deferred angioplasty.

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were recorded. Figure 1 illustrates the combined data from 4,215 patients.

The mortality following aggressive management ranged between 4 and 8% and that for conservative management between 1 and 6%. These differences were not statistically significant. Recurrent myocardial infarction (reMI) and need for coronary bypass grafting (CABG) were also similar.

Comments

These trials have been summarized in a manner to stress the difficulties of interpreting outcomes when there are large numbers of crossover patients and the intention to treat analysis of endpoints is used. In spite of this, none of these trials demonstrated a benefit of early angioplasty compared to a strategy of immediate thrombolysis followed by delayed or deferred angioplasty.

These trials do not lessen the need for early intervention among patients who do not respond to lytic therapy — one-third of the TIMI IIB trial "conservative" patients underwent early angiography — or the need for early angiography for patients in whom the diagnosis is uncertain or relative contraindications exist for thrombolysis.

REFERENCES

1. Topal EJ, Califf RM, George BS, et al. A randomized trial of immediate versus delayed PTCA after IV tPA (TAMI). *NEJM* 1987;317:581-88.
2. Simoons ML, Arnold AER, Betriu A, et al. Thrombolysis with tPA: No additional benefit from immediate PTCA (ECSG). *Lancet* 1988;1:197.
3. Immediate vs delayed catheterization and PTCA following thrombolytic therapy: TIMI II A results. *JAMA* 1988;260:2849-58.
4. Comparison of invasive and conservative strategies after IV tPA in AMI (Phase II trial). The TIMI study group. *NEJM* 1989;320:618-27.



VASOTEC®

(ENALAPRIL MALEATE) MSD

VASOTEC is available in 2.5-mg, 5-mg, 10-mg, and 20-mg tablet strengths.

Contraindications: VASOTEC® (Enalapril Maleate, MSO) is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Warnings: *Angioedema:* Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Patients with heart failure given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy. (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in patients with heart failure), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, Drug Interactions and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: *General: Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (>5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See Drug Interactions.)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness, especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors. A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Pregnancy—Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters.

There are no adequate and well-controlled studies of enalapril in pregnant women. However, data are available that show enalapril crosses the human placenta. Because the risk of fetal toxicity with the use of ACE inhibitors has not

been clearly defined, VASOTEC® (Enalapril Maleate, MSO) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Postmarketing experience with all ACE inhibitors thus far suggests the following with regard to pregnancy outcome. Inadvertent exposure limited to the first trimester of pregnancy has not been reported to affect fetal outcome adversely. Fetal exposure during the second and third trimesters of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported, presumably representing decreased renal function in the fetus. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors, but it is not clear whether they are related to ACE inhibition, maternal hypertension, or the underlying prematurity.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of ¹⁴C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

HYPERTENSION: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

HEART FAILURE: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Cardiac arrest; myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, Hypotension); pulmonary embolism and infarction; pulmonary edema; rhythm disturbances; atrial fibrillation; palpitation.

Digestive: Ileus, pancreatitis, hepatitis (hepatocellular or cholestatic jaundice), melena, anorexia, dyspepsia, constipation, glossitis, stomatitis, dry mouth.

Musculoskeletal: Muscle cramps.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION).

Respiratory: Bronchospasm, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection.

Skin: Exfoliative dermatitis, toxic epidermal necrolysis, Stevens-Johnson syndrome, herpes zoster, erythema multiforme, urticaria, pruritus, alopecia, flushing, hyperhidrosis.

Special Senses: Blurred vision, taste alteration, anosmia, tinnitus, conjunctivitis, dry eyes, tearing.

A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgias/arthritis, myalgias, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitivity, rash, and other dermatologic manifestations.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g% and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown): In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported. A few cases of hemolysis have been reported in patients with G6PD deficiency.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: *Hypertension:* In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance > 30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤ 30 mL/min (serum creatinine ≥ 3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, Pharmacodynamics and Clinical Effects.) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Patients with Heart Failure and Renal Impairment or Hyponatremia: In patients with heart failure who have hyponatremia (serum sodium < 130 mEq/L) or with serum creatinine > 1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, Heart Failure, WARNINGS, and PRECAUTIONS, Drug Interactions.) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

For more detailed information, consult your MSD Representative or see Prescribing Information, Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, PA 19386. J9V561R2(819)

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For a Brief Summary of Prescribing Information, please see the last page of this advertisement.

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ABOUT OUR LOGO

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

Survival was the first order of the day for settlers arriving on the Great Plains, and the key word of this was utility. This meant that only slightly less urgent than protection for humans was provision for the animals and, as soon as nature permitted, crops. This was a scenario that originated in the earliest times and underwent development and refinements in the form of the business center of the homestead, the barn. Through the ages, the barn's development would demonstrate necessity, ingenuity, ethnic influences, geography, weather and even artistry. The kitchen might be the domestic center of the family, but the barn was just as essential to survival.

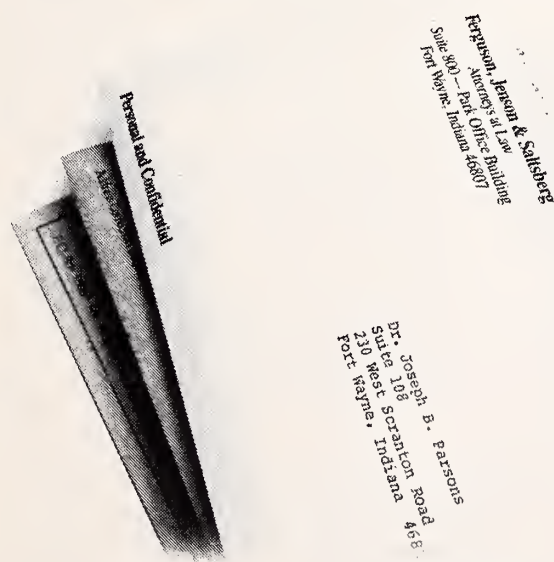
Accordingly, the barn might begin as simply as available materials and speed permitted. Initially, a single structure might shelter both stock and family in a recapitulation of barn history. Later, more sophisticated structures would meet more sophisticated requirements. It was no secret that through the ages there was more than a little similarity between church and barn architecture; in the barn parlance, one finds mention of purlins and plates, mortising and pegging, quoins and swing beams — even aisles and naves. Since the settlers (and their descendants) used wood more often than not, it was known that the barn should be placed some distance from the house, fires

being an ever-present hazard. And even before public health instructions so advised, it was known that the barn should be placed where good drainage was present. Ventilation was necessary and often incorporated into the structure with artistic intent. Barn designs grew, then, from necessity and purpose, national characteristics — and, of course, that original necessity: utility.

As with other developing areas, barn structure often reflected the national, religious or ethnic origins of the settlers. In the case of Kansas, none of these is more renowned than those of the “plain people” of various sects who brought so much to the state with their industry and dedication to agricultural pursuits. Their efforts are apparent to and attract the interest of passersby as tangible evidence of that dedication and industry.

At some point, barns became an art form, not only in themselves by their structural characteristics but as inspiration to artists. Both the old and sagging barn falling into decay, inviting ruminations on past service, and the well kept, still essential for its original purpose — survival of the farm effort — have been rendered frequently. Jim Hamil's *Return to Kansas* presents examples of both, and our cover picture expresses much of barn history through its structural features, beauty and, by all means, utility.

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The Age-Old Problem of Old Age

It seems a polite social custom to request individuals of certain qualification to use their services in unofficial settings. Thus, if a blessing is in order, the minister in the group is obviously called on. If the Thanksgiving turkey is to be carved, the surgeon is requested (with accompanying smirks) to perform. It is not surprising, then, that when some comments on the aging process were in order, the oldest living inhabitant of the office should be given the task (since he would have had to do it anyway). Though the articles in this issue will offer effective clinical information, it may be in order to include some observations on aging of personal (albeit irreverent) nature.



First, defining the last period of life as "old age," while perfectly factual and acceptable to many of its principals, is considered demeaning, and some other term has been all but futilely sought for many years. "Senior citizens" has been rather generally adopted but is a bit silly, since "senior" is defined as "higher" or "more advanced," obviously questionable except in the chronologic sense. "The golden years" and variations thereof must have been devised by some Madison Avenue type who is not into them. Certainly, it is an awkward age for many reasons, but first because it defies these euphemisms.

The government has decreed that old age starts at age 65 — and therein lies much of the problem, since the average survivor to that point presents greater resistance to the idea than at any other time. The AARP doesn't help because it accepts members at age 50, a point which the truly qualified consider to be well before the gestation period. It is our personal belief that aging, beginning to end, follows a bell curve. Consistent with this thought is that the down side of that curve is stretching out as "old" becomes progressively older because of increasing numbers of the qualified.

But this leads to our real theory of the process: senescence inversely recapitulates adolescence. We realize that the general idea may strike fear in the hearts of those at the top of our curve who are beginning to breathe a sigh of relief that the kids are just about out of that arduous earlier stage

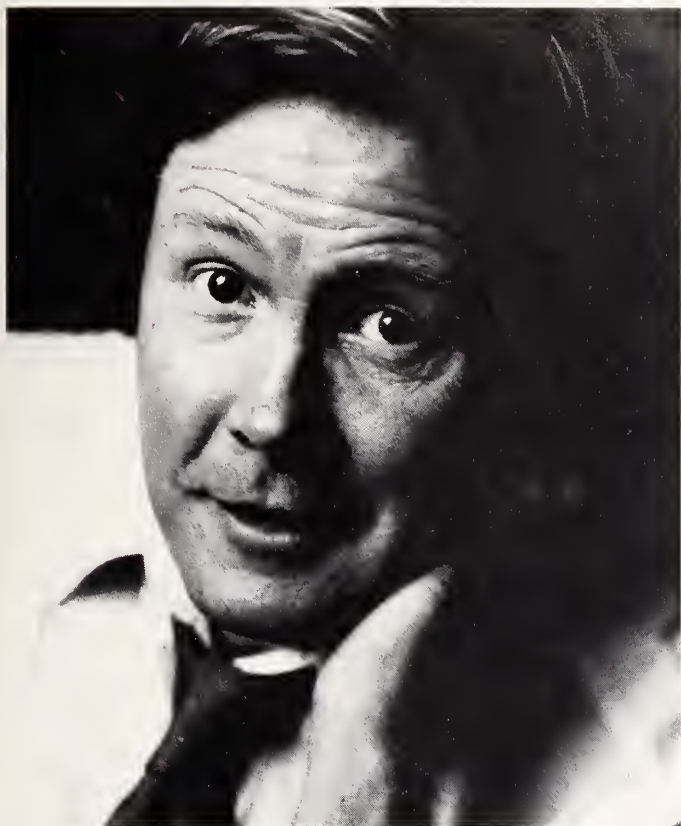
only to realize with dismay that the older members of society are presenting problems at least as perplexing. This emphasizes another point: we speak of teenagers as though they were a homogeneous group from which an extracted sample can be considered representative of the whole. In a similar vein, one of the major complications of the day in confronting this problem of aging is this persistent idea that old people are any one thing. If anything, they are more diverse in character and compelling in their needs than their young counterparts. And the "more" refers in great part to health needs — and the money to meet them.

Communications from the elderly often movingly report that they have worked long and hard and deserve the security they had expected. There is much to be said for that — and much has been done, but the complaint really is that economic changes have devalued the protections they had relied on. So society is attempting to meet a triple bill: to make up for inadequacies of the past, meet the demands of the present and prepare for an uncertain future. There is more than a little talk about "rationing" health care, and any physician can tell you that it is already happening. Any given patient is measured against bureaucratic options, almost invariably inadequate except as the physician accommodates to them.

So, the problems of meeting the health needs of the elderly are compounding and multiple pressures harden them, since they impose continuing adjustment to the physician's loss of autonomy and the insidious intrusions into the patient-physician relationship. The morality and ethics of sustaining old persons, basically a reluctance to accept the inevitable, are more frequently and openly debated. There is an increasing realization that financial stresses pose the question of which individual merits the expenditure of how much money. (Note we skip the euphemisms, "funds" or "benefits." The subject is money.) The humanitarian and financial features seem inextricably combined, and no one at the moment will come right out and say this individual or that does not warrant the spending of any more money.

Those who contend directly with adolescents are prone to complain that they are expensive to maintain. Wait until they get *our* bill. D.E.G.

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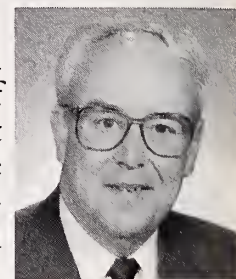
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On Unification

Printing deadlines will necessitate that this page be written prior to the annual meeting of the Kansas Medical Society. At that time, a decision will be made concerning our unified membership status with the American Medical Association. It may well be, based upon a clear mandate that emerged from a survey of physicians in Kansas, that unified membership will become optional. If that is the case, for the time being at least, one issue of unification will be put to rest. In broader terms, however, it should allow us to address aspects of unification that reside within our state borders.



All of us, as members of the Kansas Medical Society, should make a concerted effort during this next year to bring all practicing physicians into the Kansas Medical Society. In any organization, there is also strength in numbers. If we are to be an effective force in addressing the health care issues in our state, and there are many such issues, we must speak from the consensus of all physicians. Specialty interests, appropriate as they may be in different settings, have no useful function in dividing the purpose of the practice of medicine in Kansas. Academic and practice lines which have been drawn around separate groups in the past have currently blurred into extinction. Divisiveness created by narrow-vested specialty interests has no place in meeting the problems that must be corrected to make this state a more desirable place in which to practice. We need to speak as one voice, and no other forum has been created, nor need be, which can replace the Kansas Medical Society as reflecting the democratic will of the doctors in Kansas. The opportunities for such a unified voice have never been better than they are today. If all of us will work toward expanding our membership, we can develop the effective leadership that is necessary to bring about positive changes in Kansas medicine.

The recent covers of KANSAS MEDICINE have made us all aware of the rich geographical, environmental and ethnic heritage that has made Kansas the great state it is. Let the Kansas Medical Society be the unified voice for the Kansas physician.

Joseph E. Creek, M.D.

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The Kansas Natural Death Act

WAYNE T. STRATTON, J.D.,* *Topeka*

As a result of today's sophisticated medical technology, physicians are occasionally able to prolong human life for a substantial period of time beyond that contemplated even a few years ago. The consumer movement and other sociological forces have contributed to the increased desire of patients and their families to be involved in life-sustaining decisions. These factors caused the Kansas Legislature to enact the Natural Death Act.



The legislature found that adult persons have the right to control decisions relating to the rendering of their own medical treatment, including the decision to have life-sustaining procedures withheld or withdrawn in instances of terminal conditions. It also realized that situations will arise where patients are no longer able to participate actively in decisions about themselves. In order for patients' wishes to be respected, the act recognizes the right of an adult person to make a written declaration instructing his or her physician to withhold or withdraw life-sustaining procedures in the event of a terminal condition. A life-sustaining procedure is defined in the statute as any medical procedure or intervention which, when applied to a qualified patient, would serve only to prolong the dying process and where, in the judgment of the physician, death will occur whether or not such procedure or intervention is utilized.

In order to qualify under this act, the patient must have executed a declaration expressing his or her intent that lifesaving procedures be withheld if the patient is in a terminal condition. To

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

What are physicians' responsibilities?

be valid, the declaration must be written, signed and dated by the patient, and witnessed by two disinterested parties. Two physicians, one of whom shall be the attending physician, must also have personally examined, diagnosed and certified in writing that the patient is afflicted with a terminal condition.

It is the patient's responsibility to notify the attending physician of his or her written intentions. Upon being notified, the physician must include the document in the patient's medical records. It is also the physician's duty to, without delay, instigate the necessary process to obtain written certification and confirmation of the patient's terminal condition in order that the patient may be considered qualified under the act as soon as possible. If the patient previously executed his wishes in a declaration but is incompetent at the time of the decision to withhold or withdraw all life-sustaining procedures, the declaration is presumed valid. In the absence of any contrary evidence, the physician may also presume the patient was of sound mind at the time of the execution of the declaration.

Failure by an attending physician to comply with the declaration of a qualified patient shall cause the patient to be transferred to another physician. If the attending physician fails to abide by the declaration and also does not transfer the patient, the noncompliance with the act shall constitute unprofessional conduct which may result in the physician's license being suspended, revoked or limited.

The act provides that:

- The declaration of a patient diagnosed as pregnant shall have no effect during the course of the patient's pregnancy.
- A declaration may be revoked at any time,

(Continued on page 142.)

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References

1. *USP DI Update*, September/October 1988, p 120.
2. *Br J Clin Pharmacol* 1985;20:710-713.
3. *Data on file*, Lilly Research Laboratories.
4. *Scand J Gastroenterol* 1987;22(suppl 136):61-70.
5. *Am J Gastroenterol* 1989;84:769-774.



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Contraindication: Known hypersensitivity to the drug. Use with caution in patients with hypersensitivity to other H₂-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

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Drug Interactions—No interactions have been observed with theophylline, chloridiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given Axid® (nizatidine, Lilly)

an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events was due to the drug.

Axid® (nizatidine, Lilly)

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to three times the upper limit of normal, however, did not significantly differ from that in placebo patients. Hepatitis and jaundice have been reported. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Because cross-sensitivity among this class has been observed, H₂-receptor antagonists should not be administered to those with a history of hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

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Description: Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

Action: Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

Indications: Yocon[®] is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

Contraindications: Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

Warning: Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

Adverse Reactions: Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.^{1,2} Also dizziness, headache, skin flushing reported when used orally.^{1,3}

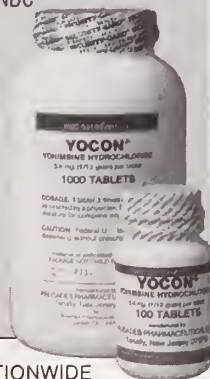
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

How Supplied: Oral tablets of Yocon[®] 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Your Vision of the Elderly May Be Just That

CLAIRE K. McCURDY, J.D.,* *Topeka*

Frequently, those of us under the age of 60 envision those over 60 as grey-haired, feeble (in body, if not in mind) and in need of myriad expensive medical services. In reality, for most of the 60+ population nothing could be further from the truth! While there are those who have specific health care needs, the concept of "productive aging" is a goal to strive toward for today's elderly.

Productive aging certainly means maintaining good health, but it is more than that. In addition to taking care of the body, it means taking care of mind and soul. In short, it means assuring a good quality of life in one's later years. Travel, volunteer work, advocacy activities, even second and third careers are becoming increasingly common among senior citizens.

State Programs

An established network of agencies and programs throughout the state assures seniors have access to the services they want and need. The Older Americans Act, a federal law, mandates that certain services be provided to the nation's elderly. While federal dollars fund the majority of programs required by the Act, state matching monies are a prerequisite to receiving federal funds.

At the state level, OAA programs are administered and monitored by the Kansas Department on Aging. The state is divided into 11 planning and service areas (PSAs), each of which is administered by an area agency on aging (AAA). Among the services each AAA is responsible for providing are congregate and home-delivered meals, legal services, employment programs and information and referral.

In addition to state matching funds for OAA programs, the State of Kansas funds several nutrition sites, as well as the Older Kansans Employment Program (OKEP). OKEP works to

*Recent Chief Counsel and Special Assistant to the Secretary, Kansas Department on Aging.

Send correspondence to the author at 2101 Potomac, Topeka, Kansas 66611.

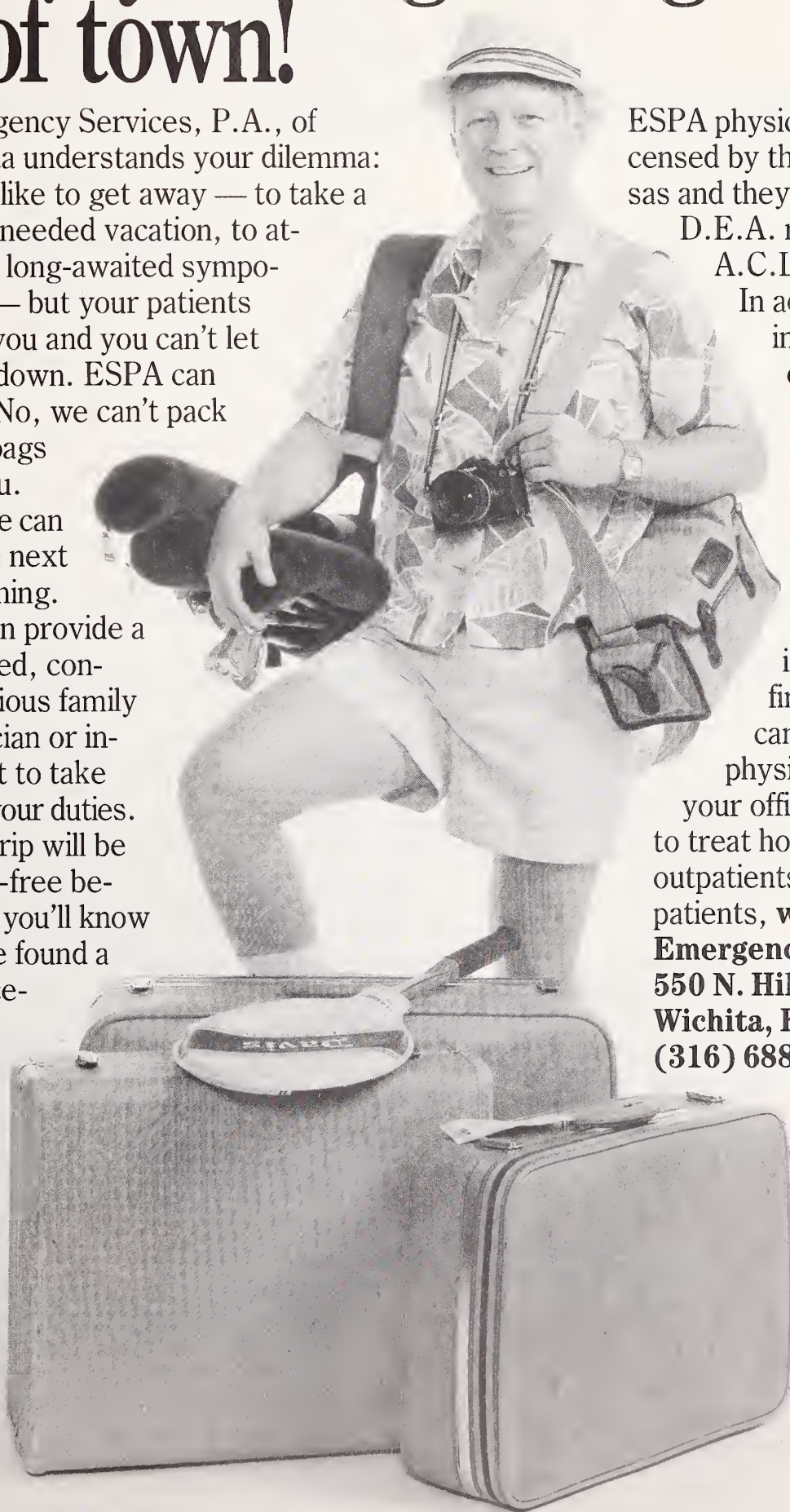
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provide employment opportunities to senior citizens in certain parts of the state. Sites are located in Manhattan, Wichita, Chanute and Topeka.

Senior Centers

Senior centers throughout the state are also a vital element in the lifestyle of Kansas' elderly. While many senior centers double as nutrition sites, their function is much broader. Senior centers are frequently the location of quilters' groups, art classes, blood pressure checks and other health promotion activities, and programs featuring guest speakers. Many serve as clearinghouses for information on services available, and as organizers of excursions to other cities and towns to shop or to visit museums or other points of interest. Clearly, the senior centers provide the opportunity for companionship and social interaction that is necessary to maintain a positive outlook on life.

Volunteer Opportunities

Volunteerism among seniors is high. Through churches and senior centers, many volunteer opportunities are available that enable senior citizens to continue to contribute to their communities by sharing their expertise.

The Retired Senior Volunteer Program (RSVP) utilizes senior volunteers in ways that stretch far beyond services to the elderly. Their work in the public schools and libraries, for example, provides the opportunity for intergenerational activities, and many assist agencies such as the Red Cross in times of emergency or disasters.

Senior Citizens Are Great Advocates

For senior citizens who see themselves as advocates there are many opportunities. Many Kansas counties have councils on aging whose job it is to give input and advice to local government officials on the needs of the elderly. Area agency on aging by-laws frequently provide that a certain number of the AAA's board of directors be over the age of 60. These boards make policy decisions about the needs of the elderly and their programs.

On the state level, perhaps the most visible voice for older Kansans is the Silver-Haired Legislature. Elected once every two years on a county-wide basis, the SHL convenes in Topeka each November to hear testimony and vote on bills they believe are important. The bills passed by the SHL are then communicated to the governor, the legislature and other state leaders. Frequently, legis-

lation is introduced during the Kansas legislative session as a result of the SHL's work.

Clearly, there are numerous opportunities and services available to assure older citizens can remain as active and involved as they choose to be in their later years. But there are also those who require medical services, and their needs must also be addressed.

Medical Services — A Continuum of Care

While many older Kansans remain active and independent well into their 70s and 80s, the aging process does take its toll on the body. Arthritis, Alzheimer's disease, heart disease, and other debilitating illnesses have a dramatic impact on the 60+ population. In recent years more attention has been focused on the development of a continuum of long-term care. As the baby-boom generation begins to age and, consequently, the percentage of the elderly population continues to increase, the medical needs of an aging population cannot be ignored. By the year 2030 it is estimated there will be 66 million people over the age of 65 in the United States — two and a half times the number in 1980. Moreover, in 1900 the average life expectancy was 46.9 years; by 1987, it was 74.9. These factors, coupled with technological advances, reflect the absolute necessity for broadening the concept of long-term care beyond the traditional idea of nursing homes.

Nationally, only 5% of the elderly reside in nursing homes, while 30% continue to live on their own. These percentages are reasonably reflective of the Kansas population as well. In the past, however, Kansas has had an unfortunate history of prematurely institutionalizing its senior citizens when their ability to perform basic activities of daily living became impaired.

Placing an elderly person in a long-term-care facility is not always the best solution. It is costly in several respects. First, such care is expensive financially. Moreover, the lack of independence and freedom resulting from the loss of one's home and the depletion of life savings can have a devastating psychological effect on the individual.

The Senior Care Act

Implementation of a continuum of long-term-care services requires the acceptance of a broad range of services which may only ultimately result in nursing home placement. Programs such as the Kansas Senior Care Act are at the other end of

(Continued on page 142.)

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Geriatric Assessment

PHYLLIS HANNAH, M.D., LINDA WRIGHT, R.N., THERESA J. MARSH, L.S.C.S.W.,
AND MORTON C. CREDITOR, M.D.,* *Kansas City*

Geriatric assessment or evaluation is said to be the unique technology of geriatrics. A number of modifiers are often included in the names of particular programs; perhaps the most descriptive title would be Comprehensive, Interdisciplinary, Functional Geriatric Assessment (or Evaluation). At KUMC it is simply the Geriatric Assessment Program.

Geriatric assessment is the concurrent ascertainment of an aged individual's state of health, physical and mental function, within the context of his or (more often) her social and environmental milieu. It includes diagnosis of disease, measurement of disability and the burden of therapy, estimation of ability to carry out basic and instrumental activities of daily living (and conversely the degrees of dependency), evaluation of available support systems and the adequacy and appropriateness of the environment.

The objectives of assessment are recommendations for optimization of the patient's quality of life (based on the patient's value system) in the face of disease and disability. It is implicit in the statement of this objective that geriatric assessment is targeted towards the frail elderly whose quality of life is threatened. A perhaps not oversimplified statement of the objective is the effort to keep community-dwelling frail elderly in the community and out of nursing homes.

Geriatric assessment is conducted in both inpatient and outpatient settings. In this paper we describe the ambulatory Geriatric Assessment Program at the University of Kansas Medical Center. It must be emphasized that geriatric assessment is an interdisciplinary process. The participants function as a team. We respect each other's particular expertise, we interact and our decisions and recommendations are the result of consensual agreement. This is different from the multidisciplinary approach in which each participant makes separate recommendations based on

"Geriatric assessment is targeted towards the frail elderly whose quality of life is threatened."

individual expertise, or where each acts on his or her own or as a consultant to a primary caretaker who makes an independent decision. Furthermore, the "captaincy" of the geriatric assessment team may shift from time to time, depending on the predominant problem presented by a particular patient.

Our care team includes a fellowship-trained geriatrician, a gerontological nurse clinician and a gerontological social worker. All have had training and experience in the care of the aged, and all are devoted full-time to geriatric and gerontological care, education and research.

Patients referred for assessment are called by the team nurse who, after a brief telephone interview, advises whether assessment seems to be appropriate. If so, she briefly describes the procedure and requests that the patient or family complete clinic registration forms and a comprehensive health and social questionnaire and bring this to the clinic, along with any pertinent hospital and medical records they can obtain. They are also asked to bring all medications, over-the-counter as well as prescription, used by the patient. If indicated by the telephone discussion, an appointment for a home visit to precede the clinic visit may be made.

At the first visit, a comprehensive medical evaluation is performed, including detailed history relating to current problems, brief mental status examination if indicated, and complete physical examination. In addition to diagnosis, emphasis is placed on estimate of severity of disease, sorting out of treatable problems and identifying the potential for rehabilitation. Special consideration is given to medication history, evidence of poly-

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Address correspondence and reprint requests to Dr. Creditor at Center on Aging, Room 5021B, KUMC-KC, 39th & Rainbow Boulevard, Kansas City, Kansas 66103.

pharmacy and the possibility of adverse drug reactions, including drug interaction. Lifestyle as it relates to primary and secondary preventive practices is explored.

Examination includes review of the completed patient questionnaire and any records which accompany the patient. History is elicited with the patient fully clothed and, in most instances, in the presence of a family member, if the patient gives permission. A complete physical examination is performed, with special emphasis on the cognitive and neurological examination, and examination of the skin, eyes, ears and mouth (with and without dentures).

Interviews are then conducted by the nurse and by the social worker, who may interview the patients with or without family members present and, when appropriate, family members in the absence of the patient (always with patient's consent, if he or she has decisional capability).

The nurse's assessment is focused on the functional state and functional capacity of the patient. This includes ability to perform activities of daily living (ADLs), such as eating, toileting, bathing, walking and continence, as well as instrumental activities of daily living (IADLs). The latter are the more complex activities required for independent activity, including ability to shop and prepare food, keep house, manage finances and communicate. The nurse's assessment may include additional measurement of cognitive function and actual observation of IADLs in an assessment laboratory or during a home visit.

The social work assessment is directed towards patient, caregivers and the environment. It starts with a psychosocial history which emphasizes emotional needs, mental health, family relationships, losses, community involvement, modes of socialization and coping skills. The interviews are structured to facilitate verbalization of feelings.

There is assessment of financial status, particularly related to real and potential health and medical care needs. Legal matters are discussed, including issues such as living wills, durable powers of attorney, estate planning and division of assets. By probing into these areas, the social worker reminds patients and families of issues the importance of which they may not have considered and also uncovers problems which the patient and family may need help in solving.

Following the individual assessments, the team members convene to share information, construct a problem list, decide about the necessity for further consultation, laboratory or x-ray studies or

home visit and to agree on the agenda for the family conference which follows.

At the family conference the findings are presented, along with a detailed explanation of their significance. Recommendations are made for management of the patient's clinical problems within the context of their functional capabilities, social arrangement, caregiver availability and capability, and physical environment. Concrete assistance is offered in the identification of community resources for such things as legal assistance, counseling, home care, day care, appliances, meal services and sites, support groups, rehabilitation and nursing home availability. It should be noted that every attempt is made to help patients postpone and, when possible, avoid nursing home placement.

Complete reports are sent to referring physicians, and all non-referred patients are asked if they wish a report sent to their primary physician.

About 165 patients have been assessed thus far. A major problem for which patients seek assessment is cognitive change, most often Alzheimer's disease, but occasionally other dementing problems. Often it is for a "second opinion," sometimes hoping for some as-yet-unrevealed cure, but frequently because families have been left without guidance after a diagnosis was made.

Depression is a common diagnosis, but the predominant problem is that of increasing frailty due to accumulated chronic disease and disability, often contributed to by over-medication, associated with fading support systems and the threat of nursing home placement.

Geriatric assessment is a very expensive, time-consuming, labor-intensive activity which is only partially reimbursable. It is not yet clear from examination of the literature whether it is a cost-effective "technology." The few well controlled studies are not consistent in their results and interpretation. There seems to be a developing consensus that the success of both inpatient and outpatient assessment is dependent on the aggressiveness with which recommendations are carried out. For this reason, we make a great effort to try to connect our patients with follow-up care, preferably in their own communities.

We have not yet done a systematic, long-term follow-up on our experience. It is our impression that most of our patients are still functioning in the community. We are encouraged by the expression of personal satisfaction on the part of patients and family. We are planning more objective study of the outcomes in the near future.

Elder Abuse

GERARD S. BRUNGARDT, M.D.,* *Wichita*

One of the major challenges facing medicine today is dealing with societal problems at the interface of health and social services, such as teen pregnancy, alcoholism and domestic violence. This paper will review the definition, prevalence, diagnosis, treatment and recent changes in the law of one of these problems: elder abuse.

It is estimated that some form of domestic violence, including child, spouse and elder abuse, occurs in half of all homes in the United States at least once a year. Domestic violence has occurred since ancient times; evidence of spouse abuse has been found in Egyptian mummies. The "Rule of Thumb" law in early America permitted a husband to beat his wife with a stick no larger than the circumference of his thumb. We do not know if domestic violence, including elder abuse, is actually increasing or if we are simply better defining the true magnitude of the problem.

Serious methodological weaknesses have plagued elder abuse (and domestic violence) research since it began ten years ago. There has been an over-reliance on interviews with health care professionals rather than with victims and families. Definitions have been imprecise, and most studies have been uncontrolled. There has been only one community, random-sample prevalence study done on elder abuse.

Definition

One of the major impediments to research in elder abuse has been the lack of uniform definitions, which has led to subsequent discrepancies in study findings. The AMA defines elder abuse as "... an act or omission which results in harm or threatened harm to the health or welfare of an elderly person." Johnson (1987) defines elder abuse as "... a state of self- or other-inflicted suffering unnecessary to the maintenance of the quality of life of the older person."

Four categories of abuse have been described.

Physical abuse includes medical health maltreatment and bodily impairment and assaults. Psychological abuse consists of humiliation, harassment and manipulation. Sociological abuse encompasses isolation, neglect and abandonment. Legal abuse includes theft and misuse or misappropriation of property.

Prevalence

It is estimated that 4% of elderly Americans suffer from some type of abuse, putting the magnitude of the problem roughly on a par with child abuse. It is difficult to determine the prevalence accurately because of inconsistent definitions, failure or reluctance to report and failure to detect.

Pillemer and Finkelhor (1988) reported the only large random-sample survey investigating the prevalence of elder abuse in the community. They found an overall prevalence of 32 per 1,000, with physical violence accounting for 20 per 1,000; psychological 11 per 1,000; and sociological 4 per 1,000. Abuse was observed in all racial, religious, socioeconomic, educational and age categories. Elderly subjects living alone underwent less abuse than widowed, divorced or never-married individuals. Those living with a spouse and at least one other person were particularly vulnerable (71/1,000), as were those in poor health (77/1,000). Surprisingly, males were twice as likely as females to be abused. In summary, an elder is most likely to be abused by the person with whom he or she lives.

Etiology

There are numerous theories concerning the etiology of elder abuse, but little objective evidence for any of them. Furthermore, it is often difficult to distinguish etiologic from precipitating factors such as stress or vulnerability. A particularly important factor is drug and/or alcohol abuse in either the abuser or the victim. Other factors to consider include the psychological state of the abuser, dependency relationships (particularly dependency of the abuser on the victim), external stress, social isolation, learned patterns of violent behavior, vulnerability, lack of resources (financial, community, other) and ageism.

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Assessment

Identification of elder abuse is very difficult, since the victim is often afraid to report it from fear of retribution or losing his or her current home. Therefore, the key to diagnosis is to maintain a high index of suspicion. It is important to identify those at high risk for abuse, potentially abusive caregivers, high-risk family situations, and the symptoms and signs of abuse. A great burden lies with the physician to make the diagnosis, since it has been well documented in the child abuse literature that physicians frequently miss possible abuse cases. Table 1 lists the characteristics of those elderly, caregivers and family situations at high risk for abuse.

The symptoms of elder abuse are very nonspecific and may be very difficult to differentiate from common medical problems. Some of the symptoms suggesting elder abuse include recurring or unexplained injuries, inconsistent history, non-treatment of medical problems, poor hygiene, malnutrition, dehydration, depression, withdrawal, fearfulness, isolation, oversedation, misuse of medication or a sudden change in condition.

In addition to a complete physical examination including mental and emotional status, the physician should seek unexplained bruises or burns, unusual patterns of trauma, head injuries, lacerations or abrasions to the face, eye trauma and

TABLE 1
HIGH-RISK CHARACTERISTICS

Elderly

- Drug/alcohol abuse
- Past abuse
- Isolated
- Dependent
- Internalize blame
- Physical/cognitive impairment
- Provocative behavior

Caregiver

- Drug/alcohol abuse
- Neuro/psych disorders
- Inexperienced
- Economic problems
- Dependent
- Isolated
- Abused as children

Family

- Isolated
- Overcrowded
- Norm of domestic violence
- Economic problems
- Lived together > 10 years

"The symptoms of elder abuse are nonspecific and may be very difficult to differentiate from common medical problems."

an unusual or pained gait that may indicate sexual abuse.

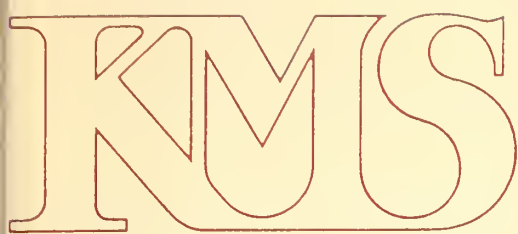
Treatment

Treatment of elder abuse involves a symptomatic, common-sense approach. The physician should institute measures to prevent any further injury. Appropriate medical evaluation and treatment of injuries should be performed. The physician should remain objective and nonjudgmental; he or she is often one of few people whom both the victim and the abuser trust, and thus critical in maintaining a therapeutic alliance with the family. Abuse should be reported to the Department of Social and Rehabilitation Services (SRS). After the acute situation has been controlled, physicians should provide access to pertinent support services, consider respite care, provide supportive counseling or psychotherapy and begin to explore alternative living arrangements. Keep in mind that the present caregiver (the abuser) may, in the long run, be the best source of care for the patient.

As with other aspects of health care, prevention may be the best treatment. When assisting patients and their families to decide on living arrangements, it is useful to identify the risk factors previously discussed. Attempts can then be made to avoid placing the elder in high-risk situations.

Legal Aspects

The 1989 Kansas Legislature passed, and Governor Hayden signed, H.B. 2108, addressing adult abuse. The key clause states, "Any person who is licensed to practice any branch of the healing arts . . . who has reasonable cause to believe that an adult is being or has been abused, neglected, or exploited . . . shall report . . . to the department of social and rehabilitation services." Abuse is defined as the "intentional infliction of injury, unreasonable confinement, fiduciary abuse, intimi-



KANSAS MEDICAL SOCIETY

Newsletter

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MAY 1990

HOUSE OF DELEGATES ACTIONS

(Details in June issue of KANSAS MEDICINE)

Among the resolutions adopted by the House of Delegates on May 6 were the following:

Unified Membership. Unified membership with the AMA is repealed. KMS and its component societies will encourage members to belong to the AMA. (90-13)

KMS-KaMMCO Office Building Project. The Executive Committee is authorized to raise funds, recommend to the KMS Council a building fund assessment and pursue implementation of the project when all arrangements are complete. (90-12)

Centralized Credentialing for Hospital Medical Staff. KMS will continue to study feasibility, and the Executive Committee will consider implementation. (90-9)

Group Health Care Insurance. The KMS Council will seek a group health care plan for the KMS membership with rates based on the total group's experience.

Ambulatory Surgery Centers. Two resolutions pertaining to ASCs were referred to the Executive Committee. One (90-17) would seek to require physicians performing surgery in such facilities to have privileges in at least one of their area hospitals. The other (90-18) directs KMS to seek appropriate legislation in 1991 pertaining to licensing of ASCs.

Kansas Foundation for Medical Care--Endorsement. KMS will continue to endorse KFMC for the coming year. This endorsement will be reviewed annually. (90-8)

Vaginal Birth After Cesarean Section. KMS supports the concept of VBACS and recommends that hospitals and their medical staffs develop protocols and guidelines. The KMS Maternal Health Committee will follow up with hospitals to determine acceptance of these recommendations, and a summary of their report will be submitted to the KMS Council in April 1991. (90-14)

Patient Access to Medical Records. KMS supports retention of current wording in §7.02 of the Ethical and Judicial Council's 1989 Current Opinions and will convey this information to the AMA House of Delegates. (90-21)

American Board of Medical Specialties Yellow Pages Advertising. Such Yellow Pages listings should contain a disclaimer explaining possible exceptions and a toll-free number for consumer information. This resolution will be submitted at the AMA House of Delegates. (90-37)

MEET YOUR PRESIDENTS



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President



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Wellington
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Topeka
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Arthur D. Snow, Jr., M.D.
Shawnee Mission
Second Vice President

AUXILIARY NEWS



Li-Ying Lee

At its May 4 House of Delegates, the KMS Auxiliary elected the following officers for the 1990-91 term:

President	Li-Ying Lee (Song-Ping), Topeka
President Elect	Lisa Barker (Stanton), Hutchinson
First Vice President	Terrie Browning (Jimmie), Clay Center
Second Vice President	Carolyn Harrison (Paul), Wichita
Recording Secretary	Joy Bell (Mark), Salina
Treasurer	Cathy Wilcox (Howard), Hays

1990 LEGISLATURE SETS KANSAS RECORD

The Kansas Constitution calls for an annual session of the Legislature and stipulates that in even-numbered years (presumably because of elections) the session shall not exceed 90 days. It also provides for an exception to the 90-day rule if two-thirds of both the House and the Senate vote to extend. Traditionally, sessions are extended a few days beyond the 90-day limit for consideration of motions to override gubernatorial vetoes and to appropriate funding for implementation of new laws.

The 1990 session was, however, a record-setting, hundred-day marathon of hearings and debates. Two of the most controversial issues of the 1990 session, abortion and property taxes, were never resolved, despite the many hours of negotiations among opposing factions. Some observers predict wholesale turnover in the House of Representatives next year because of public dissatisfaction with the non-productive Legislature.

Despite the popular notion that the 1990 Legislature was a waste of taxpayer dollars, numerous bills were passed, some of which affect the practice of medicine or health care in general. Most of these bills become law on July 1. The June "KMS Newsletter" will list selected 1990 bills that may be of interest to medical professionals and will provide a synopsis of each.

HCSF ANNOUNCES SURCHARGE REDUCTION AS OF JULY 1

The Health Care Stabilization Fund surcharges for July 1, 1990 through June 30, 1991 have been announced by the Kansas Insurance Department. The new percentages take into account lower base premiums for \$200,000/\$600,000 commercial coverage. The current and new surcharge rates are:

<u>Health Care Stabilization Coverage Level</u>	<u>Current Surcharge</u>	<u>New FY 1991 Surcharge</u>
\$100,000/\$300,000	90%	80%
\$300,000/\$900,000	120%	100%
\$800,000/\$2,400,000	135%	120%

AMA SEEKS EXAMPLES OF MISLEADING OR DECEPTIVE ADS

The AMA's Office of the General Counsel is collecting advertisements for medical services as part of an effort to encourage the Federal Trade Commission to provide better guidance as to what constitutes misleading or deceptive advertising. Examples of advertisements that appear to be misleading or deceptive should be sent to Laura Kroll, Office of the General Counsel, AMA, 535 N. Dearborn, Chicago, IL 60610.

AMERICA'S AGING
POPULATION

May is Older Americans Month, and National Nursing Home Week was observed May 14 through 20, so it seems appropriate to note a few statistics from an article in the May 2 issue of JAMA regarding trends in health needs and care of America's elderly population. As the "baby boomers" age, health care costs will escalate drastically, unless there are major changes in the health of the older population, particularly among the "oldest old" (those 85 and above). And ironically, declines in mortality from heart disease in the 65-to-74- and/or 75-to-84-year-old groups could lead to a larger population at risk for developing Alzheimer's disease or sustaining hip fractures.

According to the Census Bureau, there are now about 31 million Americans at least 65 years old. By 2040, as many as 83 million people will be at least 65, and of that number nearly 18 million could be among the oldest old, presumably requiring more long-term care and other costly medical assistance. There could be as many as 6 million people in nursing homes, 3.8 million at least 85 years of age.

Substantial advances in prevention and treatment of the most disabling diseases and disorders, and investment in research to cure them, could help to minimize future medical costs in this population.

For a perspective on current geriatric medicine in Kansas, see the May issue of KANSAS MEDICINE.

EMERGENCY ROOM
CODING CHANGES

Emergency room services performed by non-hospital-based physicians are now coded with codes 90000 through 90080. Reimbursement is, therefore, affected. KMS surveyed the major payors, as follows:

	Using codes in <u>90000 series</u>	Using codes in <u>99062-99065 series</u>	Using combinations of <u>90000 and 99062 series</u>
M'care, Topeka			X (POS 2 & emergent criteria)
M'care, K.C.	Pays at office visit level, regardless		X
BCBS, Topeka	X (pays at office visit level)		
BCBS, K.C.	X (if convenience of patient or physician)	X (if emergent or urgent)	Uses type of service as key to reimbursement

Please note that there are major differences in what is expected in terms of coding and, in two instances, significant decreases in reimbursement. This became effective April 1, 1990. SRS has not yet formulated policy, but is expected to pay at office visit levels, due to budget constraints.

MEDICAID/MEDIKAN
PROGRAM CUTS

Significant changes in the Medicaid/MediKan program are forthcoming. Restructuring of the entire MediKan program, changes in coverage in the Medicaid program and significant changes in the drug formulary and reimbursement are being discussed. Please watch your Medicaid bulletins and read the next "KMS Newsletter" for details.

DR. NELSON TO SPEAK
AT WICHITA CONFERENCE

Alan R. Nelson, M.D., President of the American Medical Association, will be the first keynote speaker at a conference in Wichita July 13-14, 1990. The conference, "Who Pays for a Healthy America: Options for Health Care in the 1990s," will examine critical health issues. For registration information, contact the Division of Continuing Education, University of Kansas, Lawrence, Kansas 66045-2600; telephone 913-864-4790.

CONGRATULATIONS

...To Ralph H. Weber II, M.D., Topeka, who has been appointed Vice President, Medical Affairs, for Kansas Blue Cross and Blue Shield. In his new capacity, Dr. Weber is responsible for provider relations, medical review and cost containment. He is the first physician member of the Steering Committee.

...And to Timothy M. Scanlan, M.D., Wichita, who has been appointed to the new position of Vice President of Medical Affairs at St. Joseph Medical Center, Wichita. Dr. Scanlan is former Chairman and Medical Director of the KMS Committee on Physician Impairment and Advocacy.

KMS SEEKS NOMINEES FOR
AMA MEDAL OF VALOR

The Awards Committee of the AMA Board of Trustees has established a new award called the AMA Medal of Valor, which will be awarded to an AMA member or members who demonstrate courage under extraordinary circumstances in non-wartime situations. Please send the name of your candidate(s) for this award to Val Braun at KMS, 1300 Topeka Avenue, Topeka, Kansas 66612, or call her at 800-332-0156 or 913-235-2383.

SURPLUS EQUIPMENT IS
NEEDED IN DEVELOPING
COUNTRIES

Rapid technological advances in American medicine lead to frequent upgrades and excess inventories of equipment and supplies. But many of these items can be used in developing countries that would not be able to afford to buy needed equipment. The Pan American Development Foundation (PADF) places medical equipment and supplies where they are needed in Latin America and Caribbean countries. For information on donating surplus equipment and supplies, contact Dr. Jaime Puccio, Director of Health Services Program, PADF, 1889 F Street NW, Washington, DC 20006; telephone 202-458-6155.

TELEVISION COVERAGE
OF AIDS CONFERENCE

The AIDS Satellite Television Network will broadcast 25 hours of the Sixth International Conference on AIDS, June 21-23. For a brochure on the program schedule, write PAAC at 101 W. Grand Avenue, Suite 200, Chicago, Illinois 60610.

THE LITTLE THINGS
MAKE A BIG DIFFERENCE
TO PATIENTS

Patients really appreciate the little touches that make a visit to their doctor's office more pleasant, according to a recent survey taken by Medical Economics. The most common, and the most appreciated, of these were free parking and free informational brochures. Other things that please patients include newsletters sent to their homes, hot and cold beverages in the waiting room, caring gestures such as inviting patients to call the physician at home in case of problems and--maybe the best of all--providing a blanket in the examining room!

dation, cruel punishment, or omission or deprivation by a caretaker or another person of goods or services which are necessary to avoid physical or mental harm or illness." Neglect is defined as "taking unfair advantage of an adult's physical or financial resources for another individual's personal or financial advantage by the use of undue influence, coercion, harassment, duress, deception, false representation or false pretense." This law expands the definition of abuse and makes reporting mandatory. Those who report are immune from civil or criminal liability; failure to report is a class B misdemeanor.

Conclusions

What are the responsibilities of physicians in the matter of elder abuse? Physicians should be aware that elder abuse and domestic violence may underlie much of what they see in daily practice, including stress-induced disease and somatic complaints. Physicians should be able to recognize the risk factors, symptoms and signs of elder abuse and be familiar with the pertinent laws and referral agencies. Elder abuse should be prevented by prospectively placing the elderly into low-risk settings. Finally, physicians should participate in research and education to better define and manage the problem.

Acknowledgment: I would like to thank Anne Egbert, M.D., for her help in reviewing this manuscript.

BIBLIOGRAPHY

1. AMA Council on Scientific Affairs. Elder abuse and neglect. *JAMA* 1987;257:966-71.
2. Callahan JJ. Elder abuse: Some questions for policymakers. *Gerontologist* 1988;28:453-58.
3. Hudson MF, and Johnson TF. Elder neglect and abuse: A review of the literature. *Ann Rev Ger & Ger* 1986;6:81-134.
4. Johnson T. Critical issues in the definition of elder mistreatment. In Pillemer KA and Wolf S, *Elder Abuse: Conflict in the Family* (Auburn Pub., Mass., 1987).
5. Jones J, et al. Emergency Department Protocol for the Diagnosis and Evaluation of Geriatric Abuse. *Annals of Emergency Medicine* 1988;17:1006-15.
6. Kosberg JJ. Preventing elder abuse: Identification of high risk factors prior to placement decisions. *Gerontologist* 1988;28:43-50.
7. Palincsar J and Cobb D. The physician's role in detecting and reporting elder abuse. *J Legal Med* 1982;3:413-41.
8. Pillemer K and Finkelhor D. The prevalence of elder abuse: A random sample survey. *Gerontologist* 1988;28:51-57.
9. Shanās E. Social myth as hypothesis: The case of the family relations of old people. *Gerontologist* 1979;19:3-9.
10. Widom C. The cycle of violence. *Science* 1989;244:160-66.
11. Wolf R. Elder abuse: Ten years later. *J Amer Ger Soc* 1988;36:758-62.

For More Information on Elder Abuse

A detailed report on legal aspects of elder abuse in Kansas, particularly regarding reporting, was published in the "Medicina et Lex" column in *KANSAS MEDICINE*, volume 90, number 7 (July 1989). Call or write the KMS office for a copy of the article if you need one.

The Kansas Department on Aging has published a handy brochure entitled *Elder Abuse: Legal Issues Affecting the Professional in Kansas*. In question-and-answer format, this guide defines abuse and provides information on reporting and on social and legal services available from the state for victims of abuse and for professionals who are assisting them. The pamphlet also contains a brief list of related publications. For a copy of this brochure, write or call: Kansas Department on Aging, Docking State Office Building — 122-S, 915 SW Harrison, Topeka, Kansas 66612-1500; 913-296-4986.

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Alzheimer's Disease: Current Diagnosis and Treatment

ROBERT A. MURDEN, M.D.,* *Kansas City*

Recently there have been numerous research advances in many aspects of Alzheimer's disease. Knowledge concerning epidemiology, possible etiologies, pathophysiology and genetics is rapidly expanding.^{1,2} While this knowledge may be useful in the prevention of or cure for Alzheimer's in the future, it is presently of minimal clinical utility. Most clinical interest is focused on the correct diagnosis and currently available therapies for Alzheimer's.

Within our state, this has been addressed in the report of the Kansas Alzheimer's and Related Diseases Task Force of the Kansas Department on Aging.³ Of the four major concerns listed in the report as facing family members of Alzheimer's victims in Kansas, one was the need for more accurate diagnosis. These family members noted that many members of the medical community lacked sufficient diagnostic expertise and current information concerning Alzheimer's. In response to that concern, this article summarizes the latest information on the diagnosis and treatment of this disorder.

Diagnostic Considerations

Alzheimer's disease is a very prevalent disorder. Traditional estimates, that 5 to 7% of all people over age 65 and 20% of all over 85 have Alzheimer's, have been challenged by a recent study suggesting up to 10% over age 65 and 47% over age 85 may be victims of this disorder.⁴ Despite this prevalence, previous studies have reported an erroneous diagnosis rate as high as 57%.⁵ This misdiagnosis rate seems to be diminishing, however, as newer diagnostic strategies are employed, particularly in institutions with specialists in Alzheimer's care. One recent report showed a 100% correct diagnosis rate in selected individuals at a research center.⁶ When misdiagnoses occur, they are most likely to be related to failure to recognize

depression, failure to recognize focal signs suggesting an etiology of dementia other than Alzheimer's and diagnosing dementia in a non-demented individual.⁵ In order to avoid such misdiagnoses, a three-step approach (Table 1) should be undertaken when evaluating any patient for possible Alzheimer's disease.

The first step is to determine whether the patient is, in fact, demented. Many problems can cause altered mental status, including depression, psychosis, benign senescent memory loss of normal aging and the conditions resulting in delirium. A dementia is said to be present only if all four of the following criteria are present. These criteria are essentially those of the NINCDS-ADRDA Work Group,⁷ which established definitions for Alzheimer's disease primarily for research purposes. The first criterion is a history of functional decline. A reliable historian must document that the patient can no longer perform tasks which he or she used to be able to perform. These would include such deficiencies as getting lost going to the store, being unable to manage finances, not being able to follow a TV program plot, etc. Thus, it is imperative to obtain a detailed history of both baseline and current functioning in many cognitive areas.

Second, abnormal neuropsychological tests must be demonstrated. This does not require formal referral. A simple mental status test such as the Mini-Mental State (MMS),⁸ reproduced as Table 2, can be administered by anyone in 10 minutes. An abnormal score (23 or less out of 30 on the MMS) is required for a definite diagnosis of dementia. Since education level can affect scores on such tests, unclear cases (e.g., low MMS score without other dementia criteria) may require referral to a specialist.

To satisfy the third criterion, global deterioration must be shown. This requires at least two cognitive areas to be adversely affected. A single abnormality of memory, for instance, can be due to benign senescent memory loss. This is a concomitant of normal aging which causes people to

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lose keys, repeat stories, forget an item or two at the store and to miss appointments, among other problems. No other cognitive areas are lost, however, and a person with memory loss only should not be labeled as definitely demented. At least one other area from among orientation, language, visual-spatial skills (copying), calculation, naming, word generation and attention should be affected. A comprehensive mental status test such as the MMS will examine most of these areas. Deficits in at least two areas should be demonstrated.

Finally, many acute conditions cause delirium, which should be distinguished from dementia. Delirium, caused by hypoxia, infections, toxins or electrolyte or metabolic disturbances, is characterized by a relatively recent onset and fluctuating levels of alertness. Dementia, conversely, is generally accompanied by at least a 2-to-3-month history of mental status changes with stable alertness.

A patient fulfilling all four of the above criteria is labeled demented. The second step in diagnosing Alzheimer's is to review the differential diagnosis of dementia to see if any other cause appears to be present. With Alzheimer's occurring in up to two-thirds of people with dementia, the second most common cause is multi-infarct dementia. This occurs in 15 to 20% of demented individuals and results from numerous large or small strokes. It is diagnosed by demonstrating a history of step-wise deterioration in functional and cognitive status (rapid losses followed by periods of plateau); risk factors for having strokes, as manifested by hypertension and evidence of atherosclerosis; and evidence of prior strokes, such as focal signs, emotional lability or abnormal CT results. It should be pointed out that multi-infarct dementia can be caused by small lacunar infarcts that may not appear on CT scan.

TABLE 1
THREE-STEP APPROACH TO THE DIAGNOSIS OF
PROBABLE ALZHEIMER'S DISEASE

1. Decide if the person is demented
 - A. History of functional decline
 - B. Abnormal standardized mental status test, such as the Mini-Mental State
 - C. Global loss of cognitive function
 - D. Absence of delirium
2. Rule out other causes of dementia by history, physical and laboratory tests
3. Decide if the person fits into one of several sub-types of Alzheimer's

Five to ten percent of dementia is alcoholic or subcortical in etiology. A history similar to Alzheimer's in a patient with a heavy alcohol intake and severe cortical atrophy on CT is usually attributed to alcoholic dementia. Subcortical dementias result from Parkinson's disease, Huntington's chorea or Binswanger's disease. These are characterized by dementia plus symptoms of subcortical neuron loss, such as abnormal movements, and extreme slowness of thought, speech and actions.

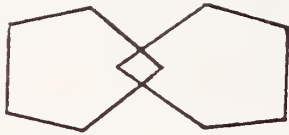
A CT scan is routinely performed in the evaluation of dementia, primarily to search for evidence of subdural hematomas, tumors such as meningioma and normal pressure hydrocephalus. A negative CT or one demonstrating atrophy alone rules out these possible etiologies. Atrophy on CT is otherwise not generally helpful in the differential diagnosis of dementia, since it correlates highly with the normal aging process.

A few conditions can, rarely, cause a potentially reversible dementia. For this reason, B₁₂ levels and thyroid functions should be obtained to search for pernicious anemia and hypothyroidism as causes, and patients with a short duration of dementia (less than 6 months) and fever or a positive serum VDRL should have a lumbar puncture to rule out chronic neurosyphilis or CNS tuberculosis or cryptococcus as causes.

Finally, drug reactions or extreme depression can cause mental status changes serious enough to fulfill all four criteria for the diagnosis of dementia. Medications with possible severe CNS effects (hypnotics, neuroleptics, antianxiety agents, cimetidine) should be discontinued in such cases to see if mental status improves. If any evidence of depression is present, a trial of antidepressant medications or psychiatric/geriatric referral is indicated. A demented person with no evidence of multi-infarct dementia, no evidence for alcoholic or subcortical dementia, unremarkable CT scan, negative laboratory studies and no evidence for drug effects or depression is said to have Alzheimer's disease by a diagnosis of exclusion.

Further confidence in this diagnosis can be obtained by applying step three from Table 1. It is now generally accepted that there are several sub-types of Alzheimer's disease.⁹ These include an early onset (before age 65) rapid-course form, the traditional slowly progressive later-onset form and a form which may include a plateau phase with no clear progression or deterioration for several years. Any of these forms may include myoclonus as a characteristic. In addition, up to 10 or 15%

TABLE 2
MINI-MENTAL STATE EXAM

	Points (Maximum)
ORIENTATION (1 point for each correct):	
Give the date, day, month, year, season	_____ (5)
Name the city, county and state of residence	_____ (3)
Name the facility and floor location of this exam	_____ (2)
REGISTRATION (MEMORY):	
Memorize these 3 words and repeat them now <i>dog, table, apple</i> (1 point for each repeated)	_____ (3)
ATTENTION AND CALCULATION:	
Perform serial 7 subtractions from 100 (100-93-86-79-72-65) OR (if above incorrect)	_____ (5)
Spell WORLD backwards (D L R O W)	
(1 point for each correct subtraction or letter position)	
RECALL (MEMORY):	
Recall the 3 words memorized above (1 point each)	_____ (3)
NAMING:	
Show a watch and a pen and have patient name them	_____ (2)
LANGUAGE (1 point for each if correct):	
Have patient repeat "No ifs, ands or buts"	
Have patient write a complete sentence	_____ (3)
Have patient read this, CLOSE YOUR EYES, and do it	
SEQUENTIAL COMMAND FOLLOWING:	
Hold out a piece of paper and have patient grasp it with the right hand, fold it, and place it on the floor (give all 3 commands <i>BEFORE</i> patient acts — 1 point for each performed correctly)	_____ (3)
VISUAL-SPATIAL:	
Copy this: 	_____ (1)
TOTAL	_____ (30)

of Alzheimer's is a familial form characterized by autosomal dominant transmission. Finally, the pattern of cognitive losses generally is memory first, naming, word generation, and orientation next, with language relatively preserved until late in the disease course. A dementia patient in whom Alzheimer's disease has been diagnosed by exclusion (Step 2) should fit into one of these many sub-type patterns of Alzheimer's. If he or she does not, re-examination of Step 2 is imperative. Routine utilization of this three-step approach should result in a diagnostic accuracy of 90%.

There is certainly no better diagnostic strategy available at this time. Researchers are working on possible antibody tests which could be performed on CSF, and looking for peripheral markers of Alzheimer's. But, although exciting discoveries have been made, currently a brain biopsy is the only confirmatory test for Alzheimer's.

Treatment Considerations

The Kansas Alzheimer's Task Force report noted that health care providers frequently failed to offer care plans and options to patients and families when Alzheimer's was diagnosed. With current

knowledge, the treatment of Alzheimer's can be divided into two parts. The first is consideration of experimental therapies aimed at slowing the disease course. The second is discussion of available supportive care.

Many regional and national experiments are presently operational examining a variety of medications which may slow the course of Alzheimer's. Most of these are choline analogs or cholinesterase inhibitors intended to increase the available acetylcholine, which is markedly reduced in Alzheimer's and thus unavailable at neuronal synapses. Some of these experiments have noted mild improvement in cognitive function for a short period, although no striking improvement has ever been found. It is appropriate for patients to be offered entry into these studies if they or their families wish this opportunity. In Kansas, trials of physostigmine and THA are currently in progress at Kansas University Medical Center, and other trials are being considered in the near future.

The second treatment issue, that of supportive care, should be offered to everyone. More detailed discussions of Alzheimer's care are available,¹⁰ but

briefly a standard supportive care plan consists of six items, three patient- and three family-oriented. The three patient-oriented items are:

- Maximize the medical status. Mental status will deteriorate more slowly if other medical conditions such as diabetes are optimally controlled, medications which could alter mental status are reduced or eliminated and good nutrition is achieved.

- Treat bothersome and inappropriate behaviors. Wandering, insomnia, incontinence, dangerous behavior and aggression are frequent and can be managed behaviorally, medically with low-dose phenothiazines such as haloperidol 0.5 mg. BID, and socially, such as by removing stove burner controls and making locks unrecognizable.

- Improve the patient's comfort and function. Keeping the patient in the most familiar available environment, allowing desired behaviors such as wandering when supervised, providing assistance for functions such as bathing, and stimulating without frustrating the mind, can all improve a patient's sense of well-being.

The three family-related items are:

- Discuss implications of the diagnosis. Make the family aware of the progressive nature of this disease, the future needs for complete care, and the fact that most cases are sporadic and other family members are not highly likely to suffer the same fate.

- Plan for the future. The family should be counseled regarding the need to explore possible nursing home care for the future, plan finances well and consider guardianships.

- Relieve stress on the family. Respite care and adult day care can improve the well-being of the patient and also provide the family with relief from the burdens of constant care of the Alzheimer's victim. Information on what is available locally can be obtained from the nearest chapter of the Alzheimer's Association (formally ADRDA).

In summary, Alzheimer's disease is a catastrophic disorder affecting a large number of Americans. Although no easy and definitive diagnostic tests are yet available, the simple diagnostic strategy presented here will greatly improve accurate diagnosis. Following diagnosis, supportive care should be given to everyone as described above, and experimental therapies may be appropriate to offer to some individuals. Perhaps current research will soon offer even better possibilities.

REFERENCES

1. Mayeux R. Alzheimer's disease. In: Hazzard WR, et al. (eds), *Principles of Geriatric Medicine and Gerontology* (New York: McGraw-Hill, 1990), 934-48.
2. Hauw JJ, Duyckaerts C, Delaere P, Lamy C, Henry P. Alzheimer's disease: Neuropathological and etiological data. *Biomed Pharmacother* 1989; 43:469-82.
3. Kansas Alzheimer's and Related Diseases Task Force Final Report, Kansas Department of Aging, 610 W. 10th, Topeka, Kansas, 1986; 1-80.
4. Evans DA, Funkenstein HH, Albert MS, et al. Prevalence of Alzheimer's disease in a community population of older persons. *JAMA* 1989;262:2551-56.
5. Garcia CA, Reding, MJ, Blass JP. Overdiagnosis of dementia. *J Am Ger Soc* 1981;29:407-10.
6. Morris JC, McKeel DW, Fulling K, Torack RM, Berg L. Validation of clinical diagnostic criteria for Alzheimer's disease. *Ann Neurol* 1988;24:17-22.
7. McKhann G, Drachman D, Folstein M, et al. Clinical diagnosis of Alzheimer's disease: Report of the NINCDS-ADRDA Work Group under the auspices of Department of Health and Human Services Task Force on Alzheimer's Disease. *Neurology* 1984;34:939-44.
8. Folstein MF, Folstein SE, McHugh PR. Mini-Mental State: A practical method for grading the cognitive state of patients for the clinician. *J Psychiatr Res* 1975;12:189-98.
9. Friedland RP, Koss E, Haxby JV, et al. Alzheimer disease: Clinical and biological heterogeneity. *Ann Int Med* 1988;109:298-311.
10. Mace NL, Robins PV. *The 36-Hour Day* (New York:Warner Books, Inc., 1984), 1-336.

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Screening for Tuberculosis in Nursing Homes

MORTON C. CREDITOR, M.D.,* *Kansas City*

Tuberculosis must be considered among the nosocomial infections which threaten aged nursing home residents. It has been demonstrated by Stead and others^{1, 2, 3, 4} that when an active case of tuberculosis is introduced in a nursing home, the disease is likely to spread widely among the residents, who are an immunologically naive population.

In one instance reported by Stead,¹ a single-source case resulted in 49 (30%) secondary cases, as judged by conversion of the tuberculin reaction, with eight (17%) developing clinical tuberculosis of the progressive primary type, including one who died. Fifteen percent of exposed employees converted their skin tests, and 5% developed clinical tuberculosis.

Narain et al.² reported a similar epidemic, and this author reported⁴ 24 conversions in a six-month period after two cases of active tuberculosis were discovered in a 460-bed nursing home.

There is also indirect evidence of nosocomial spread of tuberculosis in nursing homes. There is an unexpectedly low prevalence of tuberculin reactivity among nursing home residents at the time of their admission to the home; unexpected because a very high percentage (70–80%) of this cohort of elders were reactive to tuberculin in their early adult life. However, tuberculin testing of an established resident population reveals a much higher percentage of reactivity than on admission, suggesting spread of subclinical disease. In Stead's series,³ 12% were reactive on admission, but the point-in-time prevalence was about 30%. In this author's series,⁴ the admission and "ambient" prevalences were 13.6% and 30%, respectively.

It is not clear why the rates of tuberculin reactivity are so low. Evidence thus far does not sup-

port the hypothesis that generalized immune senescence is responsible.^{2, 4, 5, 6} It is more likely that many of these elders have outlived the tubercle bacilli lying dormant in their Ghon complexes. Whatever the cause, individuals who are non-reactive ("tuberculin negative") are susceptible to primary infection with tuberculosis.

It is therefore essential that nursing homes introduce routine measures to protect their residents and employees against the possibility of infection by the tubercle bacillus.

Recommended Routine

In any nursing home with no prior routine for tuberculosis screening, all residents and employees except those with histories of tuberculosis or known reactive tuberculin skin tests should be tuberculin tested by intracutaneous injection of 0.1 ml of 5 tuberculin units (5TU) of purified protein-derivative (PPD) antigen. The tests should be read in 48–72 hours and the greatest diameter of induration (not erythema) recorded. The ball-point pen method⁷ is helpful in this measurement. A mark is made at the point the induration halts the progress of a ballpoint pen slanted at a 45° angle and advanced towards the reaction. The distance between opposing points is measured with a rule.

Ten millimeters of induration is considered significant reactivity. If the result is not significant on first testing, it must be repeated in 2–4 weeks to pick up "boosted" reactions.⁸ In about 6% of individuals who have not been recently tested, an anamnestic boost is needed to unmask reactivity. It is essential that this be done in order to interpret the results of subsequent testing. A positive boosted reaction is one which is at least 6 mm greater than the initial reaction and at least 10 mm in greatest diameter. Subsequently all new admissions and new employees should be tested in the same fashion.

Any individual with a significantly reactive skin test should have a chest x-ray and sputum examination if coughing, and then be managed ac-

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cording to the individual clinical indication.

Thereafter, if a resident or employee is discovered with clinical pulmonary tuberculosis, all of the nonreactive probable contacts of that individual should be tuberculin tested immediately and again at six months. Just who should be retested depends on circumstances and use of best judgment. If the infectious individual roams widely through the home, all residents might need testing. If confined to a single room, or floor, or section, then retesting can be more restricted.

Any converter from nonreactivity to reactivity should be treated regardless of x-ray result or clinical symptoms unless there are specific contraindications to treatment. If there is no evidence of parenchymatous disease on chest x-ray and the resident is asymptomatic, INH for six months to one year is all that is indicated.

Ideally, barring the discovery of an infectious carrier, retesting of nonreactors should be repeated annually. Such a routine is an excellent epidemiological tool. Conversions alert the institution to the probable presence among residents, employees or visitors of a case of open, infectious tuberculosis. Cost and personnel constraints may limit the ability to carry out an annual retesting routine; however, in some jurisdictions the public health agency provides materials free of charge.

Discussion

Nursing home residents nonreactive to standardized tuberculin testing are susceptible to exogenous infection by the tubercle bacillus. The close quarters and intimate living arrangements of the nursing home provide opportunity for widespread exposure to an unsuspected carrier with open, infectious disease. A very significant percentage of elders in nursing homes who are exposed convert their tuberculins, and a high proportion of those develop clinical disease. Furthermore, because they are immunologically naive, the disease is apt to be the rapidly progressive primary type. Of those converters in Stead's study³ who were treated, only 0.16% (1 of 605) developed clinical tuberculosis, as compared to 5.9% of those not treated. It is essential that infection be detected early, and that will be possible only with the type of surveillance recommended.

It must also be stressed that initial nonreactors should be boosted before being declared truly nonreactive.⁸ If not, when tested after subsequent exposure, one will be unable to tell whether a reaction is a boost or a true conversion.

"It has been demonstrated . . . that when an active case of tuberculosis is introduced in a nursing home, the disease is likely to spread widely among the residents."

The recommendations made in this paper are consistent with those of the Kansas Department of Health and Environment.⁹ But the latter suggest a two- or three-year interval for retesting of employees, making no mention of followup of residents. There are no instructions for further action if an infectious carrier is recognized.

Finally, for those concerned about the dangers of treatment of the aged with INH, the more recent literature¹⁰ allays the early fears of age-related toxicity and clearly substantiates the safety and cost-effectiveness of treating converters.

REFERENCES

1. Stead WW. Tuberculosis among elderly persons: An outbreak in a nursing home. *Ann Intern Med* 1981;94:606-10.
2. Narain JP, Lofgren JP, Warren E, and Stead WW. Epidemic tuberculosis in a nursing home: A retrospective cohort study. *J Am Geriatr Soc* 1985;33(4):258-63.
3. Stead WW, Lofgren JP, Warren E, and Thomas C. Tuberculosis as an endemic and nosocomial infection among the elderly in nursing homes. *N Engl J Med* 1985;312:1483-87.
4. Creditor MC, Smith EC, Gallai JB, Baumann M, and Nelson KE. Tuberculosis, tuberculin reactivity, and delayed cutaneous hypersensitivity in nursing home residents. *J Gerontol Med Sci* 1988;43(4):M97-100.
5. Nieman JL, Moppin J, and Creditor MC. Additional observations on tuberculin testing in the aged. *Gerontologist* 1989;29:195A.
6. Stead WW and To T. The significance of the tuberculin skin test in elderly persons. *Ann Intern Med* 1987;107(6):837-42.
7. Sokol JE. Measurement of delayed skin test response. *N Engl J Med* 1975;293:501-2.
8. Thompson NJ, Glassroth JL, Snider DE, and Farer LS. The booster phenomenon in serial tuberculin testing. *Am Rev Respir Dis* 1979;119:587-97.
9. Kansas Department of Health and Environment. Tuberculosis Manual: Care and Control, 1986.
10. Stead WW, To T, Harrison RW, and Abraham JH. Benefit-risk considerations in preventive treatment for tuberculosis in elderly persons. *Ann Intern Med* 1987;107(6):843-45.

Durable Power of Attorney for Health Care Decision

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Effective July 1, 1989, Kansas legislatively recognized a durable power of attorney for health care decisions. The legislation, under consideration for more than two years, emerged as Senate Substitute for House Bill No. 2009 and is now codified at K.S.A. 58-625 *et seq.* The concept went through interim study and numerous hearings and drafts of legislation. The result is a fairly straightforward bill and a statutory form which may, but does not have to, be utilized. The legislation clears the uncertainty of whether health care providers could rely upon a consent given by an attorney-in-fact under a durable power of attorney.

A durable power of attorney for health care decisions is a written document by which a person, known as the "principal," designates another as the principal's agent. The writing must contain words such as: "this power of attorney for health care decisions shall not be affected by subsequent disability or incapacity of the principal" *or* "this power of attorney for health care decisions shall become effective upon the disability or incapacity of the principal." Similar words showing the intent of the principal that the authority conferred shall be exercisable notwithstanding the principal's subsequent disability or incapacity are sufficient to qualify the document under the act. Nothing in the act limits the documents solely to a power of attorney for health care decisions. Thus, a principal may incorporate financial powers and other powers in the same document as the one authorizing the attorney-in-fact to make health care decisions.

In order for the form to be valid, it must be dated and signed in the presence of at least two witnesses who are at least eighteen years of age. Neither witness can be an agent, related to the principal by blood, marriage or adoption, or entitled to any of the estate of the principal or directly responsible for the principal's health care.

As an alternative, the power may be acknowledged before a notary public.

The statute recognizes that the principal has the right to give very broad powers to the attorney-in-fact; the attorney-in-fact under a durable power of attorney has broader powers than those granted to a guardian under Kansas statute. A durable power of attorney for health care decisions may convey to the agent the authority to:

- Consent, refuse consent, or withdraw consent to any care, treatment or procedure to maintain, diagnose or treat a physical or mental condition;
- Make decisions about organ donation, autopsy and disposition of the body;
- Make all necessary arrangements for the principal at any hospital, psychiatric hospital or psychiatric treatment facility, hospice, nursing home or similar institution;
- Employ and discharge health care personnel, including physicians, psychiatrists, psychologists, dentists, nurses, therapists or any other person who is licensed or otherwise authorized or permitted by the laws of Kansas to administer health care;
- Request, receive and review any information, verbal or written, regarding the principal's personal affairs or physical and mental health, including medical and hospital records; and
- Execute any releases or other documents that may be required in order to obtain such information.

The only statutory limitation on the power is that it cannot include a power to revoke or invalidate a previously existing declaration by the principal under the natural death act. [These declarations are often referred to as "living wills." See "Living Will/Natural Death Act," in *Physician's Guide to Kansas Law* (KMS), 1989, pp. 37-38.] However, the principal may include any limitations he may wish. Simply because the statute recognizes the broad powers does not mean that the principal need incorporate those within the document. Therefore, the document should be reviewed to determine the scope of the agent's powers.

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Unless the durable power of attorney for health care decisions specifically provides otherwise, the agent's powers do not become effective until the principal becomes disabled or incapacitated. Disability is defined by the statute to be a condition where the principal's ability to receive and evaluate information effectively or to communicate decisions, or both, is impaired to such an extent that the person lacks the capacity to manage financial resources or, except for reason of indigence, to meet requirements for physical health or safety, or both. A person is not considered disabled for the sole reason that the person relies upon or is being furnished treatment by spiritual means through prayer, in lieu of medical treatment, in accordance with the tenets and practices of a recognized church or religious denomination of which the person is a member or adherent. An inability to meet essential requirements for physical health or safety means an inability to take actions necessary to provide the health care and other necessities without which serious physical injury or illness is more likely than not to occur. The statute provides that this condition will be determined by the attending physician unless the durable power of attorney for health care decisions specifically provides some other test for when the powers become effective.

If the principal has expressed desires, the agent is obligated to act consistent therewith.

The act specifically provides that the powers do not end upon death for the purposes of organ donation, autopsy and disposition of the body. The principal may designate anyone he or she wishes to be the agent, except that the principal

cannot designate a health care provider or an employee of a treating health care provider, or an employee, owner, director or officer of a health care provider unless that person is related to the principal by blood, marriage or adoption, or the principal and agent are members of the same community of persons who are bound by vows for religious life and who conduct or assist in the conducting of religious services and actually and regularly engage in religious, benevolent, charitable or educational ministrations or the performance of health care services.

The act states that if a power of attorney had been executed before July 1, 1989 and gave powers to make health care decisions, that power is not limited, invalidated or otherwise affected by the act.

The execution of a durable power of attorney for health care decisions revokes any prior durable power of attorney for health care decisions. Any durable power may be revoked at any time by either the principal or by a guardian who is appointed by a court. However, a voluntary revocation does not revoke or terminate the agency of a person who, without actual knowledge of the revocation, acts in good faith under the power.

Although the statutory form need not be followed exactly, it does provide a form which can be given to patients for their utilization. However, health care providers should be careful not to give advice as to the effect and impact of such a durable power of attorney. The statute also includes a form, which accompanies this article.

(Please turn to page 140.)

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DURABLE POWER OF ATTORNEY FOR HEALTH CARE DECISION

CREATION OF DURABLE POWER OF ATTORNEY

I, _____ designate and appoint:

Name _____

Address _____

Telephone No. _____

as my agent to make health care decisions for me as authorized in this document. (This person cannot be a health care provider or an employee, owner, director or officer of a health care provider unless related to you or a member of the same religious community bound by vows.)

If the above named agent is unavailable or unwilling to act as my agent, then I designate the following persons to serve as my agent to make health care decisions for me as authorized in this document, such persons to serve in the order listed below:

First Alternate Agent (Optional):

Name _____

Address _____

Telephone No. _____

GENERAL STATEMENT OF AUTHORITY GRANTED

Pursuant to the language stated below, on my behalf my agent may:

(1) Consent, refuse consent or withdraw consent to any care, treatment, service or procedure to maintain, diagnose or treat a physical or mental condition and to make decisions about organ donation, autopsy and disposition of my body;

(2) Make all necessary arrangements at any hospital, psychiatric hospital or psychiatric treatment facility, hospice, nursing home or similar institution; employ or discharge health care personnel, to include physicians, psychiatrists, psychologists, dentists, nurses, therapists or any other person who is licensed, certified or otherwise authorized or permitted by the laws of this state to administer health care as the agent shall deem necessary for my physical, mental and emotional well-being; and

(3) Request, receive and review any information, verbal or written, regarding my personal affairs or physical or mental health, including medical and hospital records, and execute any releases of other documents that may be required in order to obtain such information.

In exercising the grant of authority set forth above, my agent for health care decisions shall: [Here may be inserted any special instructions or statement of the principal's desires to be followed by the agent in exercising the authority granted.]

LIMITATIONS OF AUTHORITY

(1) The powers of the agent herein shall be limited to the extent set out in writing in this durable power of attorney for health care decisions and shall not include the power to revoke or invalidate any previously existing declaration made in accordance with the natural death act.

(2) The agent shall be prohibited from authorizing consent for the following items:

(3) This durable power of attorney for health care decision shall be subject to the additional following limitations:

EFFECTIVE TIME

This power of attorney for health care decisions shall become effective (initial one):
— immediately, and shall not be affected by my subsequent disability, incapacity or death; or
— upon the occurrence of my disability or incapacity as defined in K.S.A. 59-3002 and determined by my attending physician.

REVOCATION

Any durable power of attorney for health care decision I have previously made is hereby revoked. This durable power of attorney for health care decisions may be revoked by any instrument in writing executed, witnessed or acknowledged in the same manner as this document.

EXECUTION

Executed this _____, _____, _____
month day year
at _____
Principal _____

This document must be: witnessed by two witnesses, OR
acknowledged by a notary public.

(1) Witnesses — two individuals of lawful age who are not the agent, not related to the principal by blood, marriage or adoption, not entitled to any portion of the principal's estate and not financially responsible for principal's health care.

Witness _____
Address _____

Witness _____
Address _____

OR
(2) STATE OF _____ ss:
COUNTY OF _____

This instrument was acknowledged before me on date _____, by _____
(name of person)

(SEAL, if any)

Signature of notary public

My appointment expires: _____

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MEDICINA ET LEX

(Continued from page 120.)

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(Continued from page 124.)

the spectrum. The purpose of the KSCA is to provide the elderly assistance with the activities of daily living in their own homes. A person with arthritis whose range of motion is restricted may receive help with such things as meal preparation and dressing. Services are paid for on a sliding-fee-scale basis according to the client's ability to pay, with state dollars paying the balance. This type of program is less costly than institutionalizing the individual in a nursing home, and allows the maximum level of dignity and independence possible.

The KSCA is currently operating in only three areas of the state. As such home- and community-based services are expanded and become a more widely accepted part of long-term care, the needs of the elderly will be better served. Awareness and utilization of the services currently available are the first steps. Much work remains to be done, however, and important policy decisions must be made.

Conclusion

The lifestyles of Kansas' elderly are varied. Most are active, involved individuals who continue to contribute to their towns and communities in a variety of ways. For those whose health is failing or whose activities are restricted for some reason, the challenge is to respond in a way that addresses their needs from a broad perspective.

Kansas physicians have responded well in the past, and many have taken an active role in the care of their elderly patients. Supporting the expansion of long-term-care services available today, and assisting in the development and implementation of new, innovative programs in the future will ensure a good quality of life for the elderly in our state.

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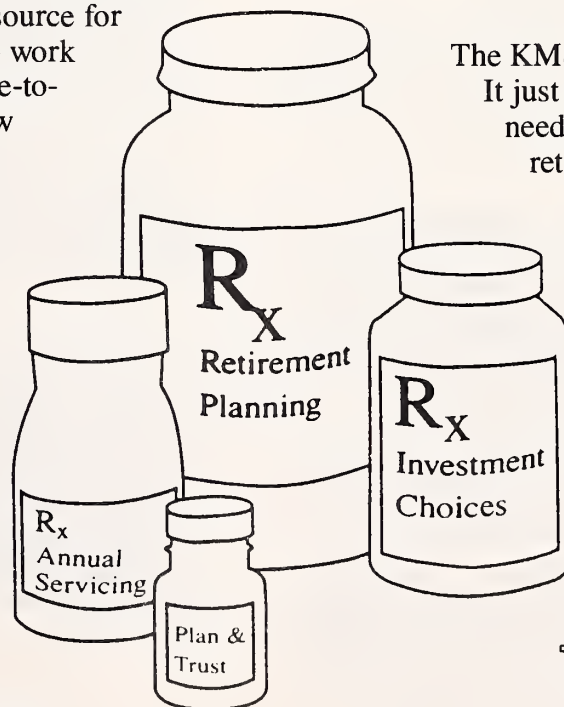
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Acute Myocardial Infarction: Is Streptokinase Really as Effective as Tissue Plasminogen Activator?

DONALD L. VINE, M.D.,* *Wichita*

The recently completed Italian trial (GISSI-2)¹ suggests that a drug costing less than \$200 may be as effective in the treatment of acute myocardial infarction as another which costs more than \$2,000. But while many feel that the choice of thrombolytic agents has been made easier, others are concerned that the lack of early heparinization in the design of the GISSI-2 trial was a critical omission.

International Trial

The International SK/t-PA Mortality Trial² combined the GISSI-2 data with those of 13 other centers. Together, more than 20,000 patients presenting within six hours of the onset of symptoms suggesting an acute myocardial infarction were randomized to receive either streptokinase, 1.5 million units, or t-PA, 100 mg. The patients were further randomized to receive either heparin, 12,000 units, 12 hours after the onset of the lytic infusion, or to receive no heparin.

The hospital mortality rate was 8.7% overall, and there was no significant advantage associated with using t-PA, either alone or in combination with heparin (Figure 1).

Stroke, which occurred with a frequency of approximately 1% overall, was three per thousand more likely to affect patients who were treated with t-PA, and this small increase was statistically significant. Other major complications were more frequent among patients treated with streptokinase.

The theoretical implications of the International Trial extend beyond the simple question of whether the thrombolytic agents are equivalent in terms of mortality reduction. The available data strongly suggest that reperfusion is the basis for

thrombolytic effectiveness and that t-PA produces reperfusion about a third more often than SK (75% versus 50%). Since true therapeutic equivalence between SK and t-PA would challenge the theoretical basis for thrombolytic therapy, the methodology of the International Trial is receiving intense scrutiny.

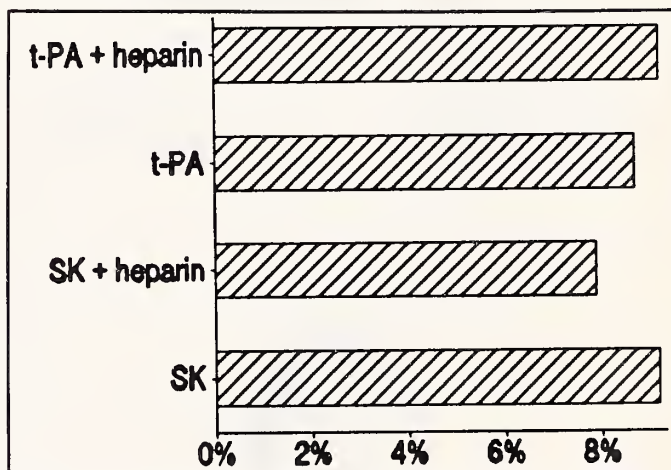


Figure 1. Hospital mortality (International SK versus t-PA trial).

The HART Study

The importance of heparin as an adjunct to thrombolysis using t-PA was studied by randomly assigning 205 patients with an acute myocardial infarction to subsequent therapy with either 80 mg of ASA or heparin (5,000 mg bolus followed by an infusion of 1,000 units per hour).³ Angiography, performed at 7 to 24 hours, revealed a patency rate of 82% for patients treated with t-PA followed by immediate heparinization, compared to 52% for patients treated with t-PA followed by ASA. Follow-up angiography at 7 days revealed continued patency in 72% of patients treated with t-PA plus heparin, versus 49% of t-PA-plus-aspirin-treated patients.

Comments

The HART Trial shows a strong relationship be-

*Associate Professor, Department of Medicine, University of Kansas School of Medicine-Wichita

Address correspondence to Dr. Vine, Department of Medicine, UKSM-W, 1010 N. Kansas, Wichita, KS 67214.

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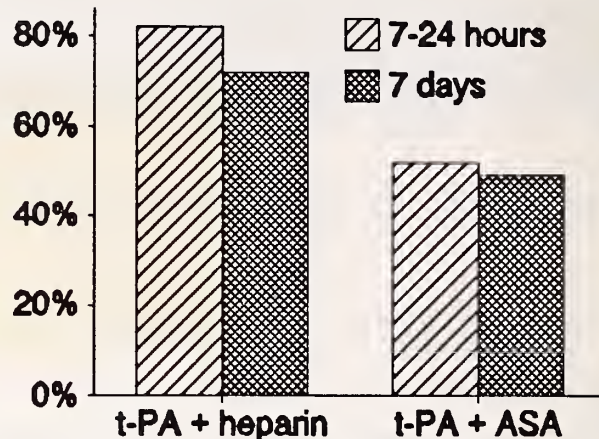


Figure 2. Patency after t-PA: heparin versus aspirin (HART Trial).

tween coronary artery patency and the early use of heparin following the administration of t-PA (Figure 2).

In the International Trial, heparin administration was delayed for 12 hours. Since the half-life of t-PA is less than the half-life of SK, the omission of early heparinization may have neutralized the expected advantage of higher reperfusion rates associated with t-PA administration.

Until SK and t-PA are compared using protocols similar to those used clinically in the United States, the question of therapeutic advantage will remain unanswered. In the interim, the choice of thrombolytic agent will remain a subject of debate.

REFERENCES

1. Tognoni G. "GISSI-2 results."
2. Van de Werf FJ. "The International t-PA/SK Mortality Trial."
3. "Heparin versus aspirin as an adjunct to thrombolysis with t-PA in acute MI."

All presented at Myocardial Reperfusion 1990, New Orleans, March 17, 1989. Sponsored by the University of Michigan Medical School.

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Official Proceedings
Myasthenia Gravis



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Dr. Holwick outside of hospital where she practices as a civilian traumatologist.



Dr. Holwick in operating room at Letterman Army Medical Center.

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References

1. *USP DI Update*, September/October 1988, p 120
2. *Br J Clin Pharmacol* 1985;20:710-713.
3. *Data on file*, Lilly Research Laboratories.
4. *Scand J Gastroenterol* 1987;22(suppl 136):61-70.
5. *Am J Gastroenterol* 1989;84:769-774.



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an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

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In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events was due to the drug.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to three times the upper limit of normal, however, did not significantly differ from that in placebo patients. Hepatitis and jaundice have been reported. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Because cross-sensitivity among this class has been observed, H₂-receptor antagonists should not be administered to those with a history of hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

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**ABOUT OUR LOGO**

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

Churches were a central element of newly established communities, as they signaled a move toward stability for the settlers of the unbroken prairies. This important function is given appropriate attention in Jim and Sharon Hamil's *Return to Kansas*. Their renditions not only pay tribute to this element of those aggregations of human life that moved into various areas, but also point to historical features of the substance of those communities. Not infrequently, religious affiliation was the binder that held the group together in the first place as they sought a new life.

This is the third time within a year that a cover of KANSAS MEDICINE has recognized that element and paid tribute to the state's dependence upon those expressions of community character and strength through Jim's paintings. In December 1989, it was the small frame country church which prompted our thoughts regarding the Christmas season. In March, St. Mary's Catholic Church in Strawberry Hill stressed the reliance of ethnically mixed, urban inhabitants on the church for spiritual support (though today their native territories are still — or again — wracked by age-old differences). And in the background of the March cover painting, another church could be dimly seen in the distance.

The present cover shows still another aspect of the church's presence in the settlement of the state. St. Joseph's Catholic Church in Damar is representative of the many churches that are distributed over the prairie and make unforgettable scenes from a distance as they rise above that expanse to advise the passersby that living, breathing, working, God-fearing people have established themselves in the area. This structure is typical of many that may be seen in relatively small communities — and it must be admitted that Damar, in Rooks County, is no metropolis, having a population of approximately 200.

Though not a product of the earliest days of Kansas settlement — it was built in 1912 at a cost of \$175,000 — it is obviously no Johnny-come-lately, either. Conforming to the general lines of Romanesque Revival style, with its two towers, pitched roof and stained-glass windows, it is located appropriately on Church Street and is listed as a National Historic Site. Whatever it brought from abroad in style, it is constructed of native limestone, so its stability combines materials, dependence on religious convictions and the will of the people. Not unlike the state.

Move Over, Sisyphus

This legendary gentleman, you'll recall, had the misfortune of displeasing the gods and thus being condemned to an existence of continually pushing a stone to the top of a mountain, only to have it roll down again — and again. Unknowingly, perhaps, he established the classical example of one of mankind's current favorite pastimes: complicating life as much as possible. As if the initiating effort of translating new thoughts into actions were not rigorous enough, we must put them through a never-idle mill of social grinding in an effort to refine them suitably for our consumption — by which time a new supply of grist has arrived.



This leads up to a case in point: the current human genome project that plans to map the 100,000 genes on the human chromosomes. This is a laudable effort, and the projected benefits for the future are limited only by the myopia of our dismayed intellect. The implications for identifying human characteristics and susceptibilities are exciting, even (to our mundane mind) staggering. The effort will be decried by some but is as certain to be pursued as the unrelenting passage of time and our inability to contain our human curiosity. So we must get on with it.

But even as we roll the stone of progress to the top of the mountain, we are confronted not only with the possibility that false directions will lead to its rolling back down; even as we reach one success (and before assimilating it), we'll find new mountains lying ahead, and the struggle will continue. Already, one aspect of such obstacles has been reported from the AMA's Office of the General Counsel: the legal problems that will come with the expanding knowledge of our personal beings. Their concerns at this point, reflecting our current preoccupation with human rights, relate particularly to those problems growing out of employment and the application of such knowledge to individuals — essentially the right to privacy.

When we can define a person by his or her most personal features, the codes that produce

the individual in fact and potential, the privacy concepts we are struggling with now take on new perspectives. It will mean a compounding of those concepts of the past, based on our conditioning of genetic immutability, with capabilities only recently unbelievable. Already, ability to alter genes is moving rapidly and when identification and alteration capabilities meet, we shall, indeed, have enough stones to keep us busy for some time.

As these efforts affect all health problems — actual, threatened, potential — the employment arena will likely be an early focus. Requirements for employment for a given purpose will necessitate close definition, and the actuality of employment will warrant continuing scrutiny to maintain equitable interpretation of employee-employer relationships. Genetic concerns will take their place alongside the environmental problems so prevalent today. Obviously, the effort to meet these expanded obligations extended from those existing controls, even though they have been developed without the significant information that the genetic message will provide. Increasingly, application of these intensely personal features to public purpose will complicate public activities.

All of this depends upon the integrity of the studies and the reliability of the findings — as well as our capacity to foresee the problems they will bring. Discrimination problems will have a new front. Employer responsibility in providing employee medical service and continuing support will be affected by the question of the genetic contribution to the matter — already present but limited in its role by the lack of specific demonstration. Risks to others, now imprecise in many cases, may well be more exactly determined — but in either direction: less or more. That adequacy and application of test results defining the individual genetic character will be the focus of extensive public concern — especially when the application will be detrimental to one party or another — seems inevitable when we apply the findings to society.

It should be a challenging world for our colleagues of the future — if they are not too preoccupied with pushing the stone. D.E.G.

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Access to Health Care

For the past several years, while this country has been consumed by the problems of rising health care costs, a parallel issue of access of our citizens to adequate health services has received only fragmented and ineffectual attention. Access to health care has always been of great concern to the public and has generally been regarded as a fundamental right of a caring, democratic society such as ours. And yet, despite attempts by other countries to assure such access through tightly structured governmental plans, our nation has not addressed the problem in a coordinated fashion.



But now, within the past year, we have seen a number of organizations and political groups develop an interest in this subject to the point of issuing position papers, the calling for a national universal insurance program and the implementation of a novel, state-funded eligibility plan. The AMA took the national leadership role in March, in the announcement of their Health Access America proposal. This was followed in one month by a position paper presented at its national meeting by the administration of the American College of Physicians, which boldly focused on establishing a national universal access to health insurance program. Suddenly there appears to be emerging a dialogue among leadership of physician organizations, consumer advocates, politicians, and national bureaucracies, a dialogue tinged with pleas of urgency, universality, national entitlements and a great deal of public posturing.

What is needed badly in this emerging cacophony of national proposals is a bit of cautious common sense. This was wisely addressed by Professor Ginzberg in a recent writing in the *New England Journal of Medicine* (1990;322:pp.1464-66). He pointed out that in our environment of divergent interest groups — government, employers, households, physicians and hospitals — no clear strategy has emerged that has commanded broad support as to how to change the existing system. Cumbersome, costly, and restrictive as it may be, our current pluralistic health system provides choices, offers local and regional adjustments and protects against the further intrusion of centralized bureaucrats. As we move

into our national discussions on access to health care, let us do so in ways that will not destroy our present health care system. We need not throw out the baby with the bath water.

And one additional point: Let the discussions begin and focus at the community and state level. Our nation, from its very founding, has developed national policy only after debate and concession at the local and state level. Recently, the State of Oregon embarked upon an ambitious and innovative plan which links health access to a defined priority system. This was implemented only after multiple and repetitive community discussions. The leaders of our national medical organizations need to remember a fundamental law of politics: Those who fly in the face of their constituency are subject to permanent grounding.

We in Kansas have an opportunity to join in the discussions on access to health care through two forthcoming forums. The first, "Who Pays for a Healthy America: Options for Health Care in the 1990s," will be held in Wichita on July 13 and 14. Dr. Alan Nelson will deliver a keynote address, and the audience will have an opportunity to join in the discussion with a number of state leaders. Later this year, the Kansas Medical Society, under the direction of Dr. Larry Anderson, will offer another forum for discussion of issues in improving access to health care. It would seem prudent and sensible for all Kansas physicians to enter into these discussions and help formulate our own state policies and programs, based upon our local needs and priorities. Following this, we have an excellent opportunity to carry our messages to American medicine through that most democratic of medical organizations: the American Medical Association. A national program may well be needed to assure access to health care for all Americans, but let such a program develop from the ground up; only then will we be able to capture a consensus for major reform of our health care system.

Joseph E. Lueck, M.D.

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Implications of the National Practitioner Data Bank

WAYNE T. STRATTON, J.D.,* *Topeka*

The final regulations issued by the Department of Health and Human Services for the "National Practitioner Databank for Adverse Information for Physicians and Other Health Care Providers" are expected soon. The purpose, as stated by the legislature, is to improve the quality of medical care by restricting the ability of certain physicians and dentists to continue to change practice locations without the disclosure or discovery of their previous misconduct or incompetent performance. While time will be the true indicator of the databank's success, for now physicians need to be aware of exactly what the requirements of the law are and how they will be affected by it.



Possibly the most important aspect relating to physicians is the reporting requirement. The act will mandate that all payments made under an insurance policy, self-insurance or otherwise, for the benefit of a physician in a settlement of or in judgment against such physician, be reported to the databank. This information must be reported by those making the payment, including an insurance carrier. Whoever is making the payment on behalf of the physician is required to provide information, including a description of the acts or omissions and injuries or illnesses upon which the action claim was based. The payment or settlement of a medical malpractice claim, however, is not to be considered evidence that medical malpractice has indeed occurred.

Hospitals, peer review committees or boards,

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

What will it mean to me?

professional societies and HMOs will also be required to report to the state licensing board any "adverse action on clinical privileges" of a physician. Adverse action will include any professional review action that adversely affects the medical privileges of a physician for more than 30 days. In addition, any acceptances of a surrender of clinical privileges, or any restrictions of clinical privileges of a practitioner must be included. The regulations will require that the report contain detailed information about the affected physician, as well as details about the loss, surrender or restrictions of clinical privileges. However, adverse action will not include professional review actions taken against a physician based upon technical or administrative failings unrelated to the health or welfare of patients. A physician's voluntary reduction in clinical privileges for reasons of personal preference is also not a reportable event.

While this reporting requirement is similar to the reports hospitals are already required by Kansas law to make to the Kansas Board of Healing Arts, soon the state board will also be required to disclose to the databank the information it receives from the reporting hospital. Since the federal regulations will insist on certain detailed information concerning adverse actions on clinical privileges, the privileged status given some information in peer review records by Kansas statutes may no longer be preserved.

Reports made to the databank are not immune to challenges. When a report is filed on a physician, he or she will be mailed a copy. To promote accuracy of information, all reports filed will be held for 60 days prior to disclosing the contents to any parties other than the subjects of the report. The purpose of this 60-day waiting period is to allow the opportunity for corrections or revisions to be made prior to the report's release.

Therefore, once a report is filed with the databank, a physician who is the subject of the report has 60 days in which he may contest its contents.

If the physician decides to dispute the report, he or she must inform the secretary and the reporting entity, in writing, of the disagreement and the basis for it. At the same time, the physician should request that the disputed information be entered into a disputed status and be reported to any inquirers as being in a disputed status. The physician should then attempt to enter into a discussion with the reporting entity to resolve the matter. When a physician disputes a report, the secretary will review only the statement on file by the reporting disputing parties in order to resolve the dispute. When the 60-day waiting period has expired, if the resolution of the dispute is still pending, the report will be labeled as "disputed," but it will be subject to release upon a valid request. However, if the information is found to be accurate, the report will merely contain a statement by the physician describing the basis for the challenge and an explanation of the secretary's decision. If the information is determined to be inaccurate, corrected information will be sent to all those who had previously requested a report.

Once the regulation is in effect, access to the information contained in the databank will be

limited. As previously stated, hospitals will have access, and any physician may request the information on file about himself or herself. State licensing boards will also have access to the information in the databank. In medical malpractice actions, attorneys or pro se litigants who have filed against a hospital will be permitted to request information about a specific physician who is also named in the suit. However, the databank will consent to the request only if evidence is also submitted showing that the hospital failed to request information from the databank about a physician who is on its staff or has medical privileges.

Except as provided for in the regulations, the information in the databank will also be considered confidential. This confidentiality applies to parties who receive information from the databank directly or indirectly. However, the party who requests the information may disclose it to carry out the purpose for which the information was sought, but only for that purpose.

Finally, physicians should also know that upon applying for a position on a hospital's medical staff or for clinical privileges, the hospital will be required to request information from the databank concerning that physician. In addition, every two years the hospital must again request information on all the physicians on the medical staff or having clinical privileges.

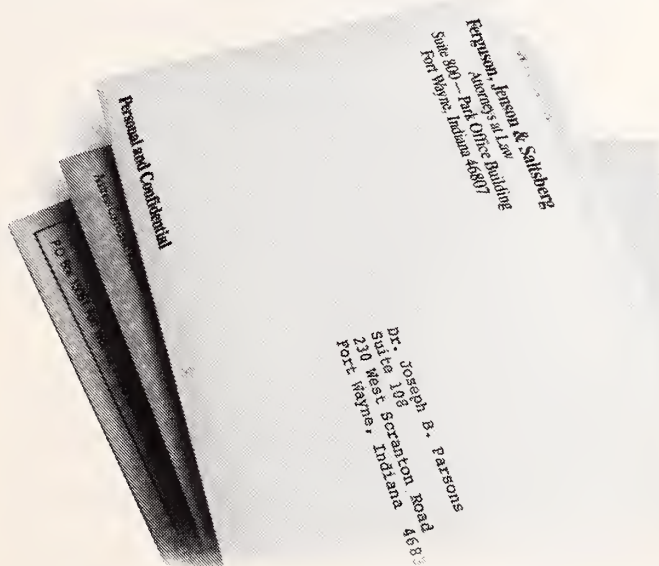
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President's Message to the KMSA House of Delegates

I am honored to be your president.

I was born and educated in Taiwan with a bachelor's degree in business. Back in the 1940s and 50s, while I was in school, we were taught to obey the teachers, and to bow to them when passing them in the hallway. I remember that I had to answer my teachers' questions, but I don't remember that I ever got up to ask my teachers a single question in class. Naturally, I never had courses such as "Speech" or "Debate." In 1965, I married Song-Ping Lee, who is an otolaryngologist. We have three sons, aged 19, 21 and 23.



Eleven years ago, when I was Treasurer of Shawnee County Medical Auxiliary, each time I got up to do my report, I shook, I perspired and I thought I was going to pass out. But my county auxiliary members did not give up on me. After serving as local president, I began to be involved in the state auxiliary. My first job was as Ann Rempel's historian. As a result, this organization provided opportunities for me to learn a variety of leadership skills. The friendships and the fun times I have had for the past 18 years within our group have become one of my most rewarding experiences.

My theme this year is "KMSA, a positive voice in medicine." While the number of professional liability claims has decreased in recent years, our spouses are still facing significant professional liability insurance premiums, an overburden of paperwork and ever-increasing third-party interference, such as non-physicians looking over their shoulders, trying to tell them what to do and what not to do, and how they should charge. Our physicians must have the freedom to concentrate on taking care of their patients. As an organized group, we need to remain active and informed so that we can be a strong voice for our spouses when the time is appropriate.

We should continue to emphasize four major areas: AMA-ERF, health projects, legislation and membership. As individuals, we must be sensitive

"We should continue to emphasize four major areas: AMA-ERF, health projects, legislation and membership."

to the needs of our community. Let's not forget the increasing needs of our aging population and the indigent children who are in need of medical programs and insurance.

At this point, I have lived one-half of my life in Taiwan and one-half of my life in the United States. I also have had the opportunity to travel in Europe a great deal. I have realized that this is the best place on earth to live. I appreciate the freedom and security we enjoy. My recent visit to Taiwan makes me feel even more strongly that we must not take these gifts of liberty and freedom for granted. We must be aware of our surroundings, where solutions are needed and where each of us can make a difference.

As an organized group, as well as individually, we can be a significant force for the betterment of our medical family, our community and our country.

Thank you for giving me the opportunity to learn and to serve.

Tell us where it hurts.

Retirement planning shouldn't be painful . . . but if you're like most physicians, treating your own financial symptoms can be difficult and time-consuming. Knowing your options and opportunities for retirement . . . and then choosing the right plan and funding vehicles are never easy. *And now changes in the tax law require that every existing retirement plan be updated to ensure its continued tax-qualified status.* The wrong choice can really hurt your future.

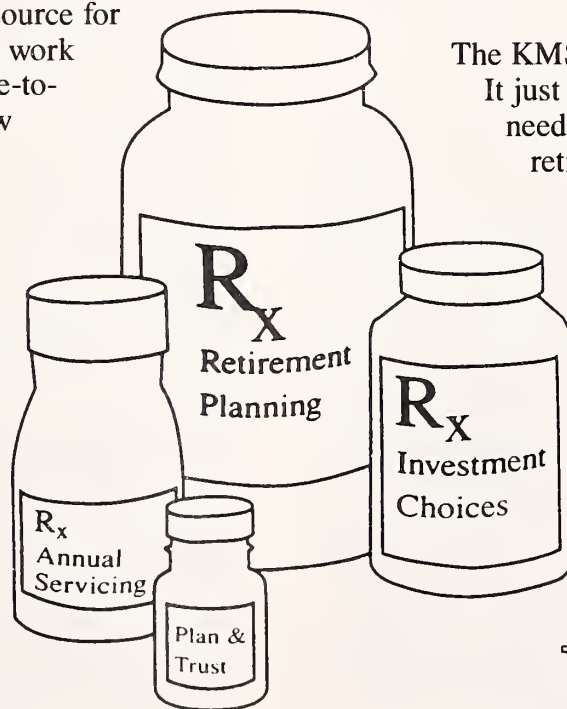
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Council District Reports

DISTRICT 2

The Wyandotte County Medical Society, which comprises District #2, basically has maintained the status quo during the last year. We have gained some new members, but we have also lost some members. Attendance at Society meetings continues to be a problem; there are too many demands on the physicians' time.

The accomplishment of planning and implementing MEDHELP, the Society's program to provide medical care free of charge to those citizens of Wyandotte County below the federal poverty guidelines and not covered by Medicare, Medicaid or private insurance, has continued to be a source of pride for the Wyandotte County Medical Society. By keeping a fairly low profile, we have not been overwhelmed with patients, and as a result the cooperation of all involved has remained at a high level.

WCMS, through a Resolution to the Council, requested KMS to conduct a survey of all physicians in the State of Kansas to determine their opinion regarding unified membership. It was hoped by WCMS that the KMS House of Delegates would look at the results of this poll realistically at the KMS Annual Meeting in May.

Barbara P. Lukert, M.D., *Councilor*

DISTRICT 3

The Johnson County Medical Society, Council District 3, continues to pursue an active role of public and professional service. Doctor William McEachen has been our representative in assessing and providing medical care for uninsured people, especially children, in conjunction with local voluntary and county agencies. The society has also provided judges for the Kansas City Metropolitan Area Science Fair for school children.

In October 1989, the society sponsored as guest speaker Peter Huber, author of *Litigation: The Legal Revolution and Its Consequences*. Invited guests included civic leaders and area legislators. The attendance was approximately 200 people.

A membership committee has been created under the leadership of Doctor Cranston Cederlind in an attempt to bolster our presence in the medical community. A public relations firm has been engaged in order to further our efforts to be a

voice and participant in community matters affecting public health.

A series of seminars has been sponsored by the Johnson County Medical Society on CPT coding for physicians and their office personnel.

Eugene W. J. Pearce, M.D., *Councilor*

DISTRICT 4

Crawford/Cherokee County. The Crawford/Cherokee County Medical Society met monthly from January to June and from September to December. At each meeting there was CME activity, and the participants earned 20 hours of AMA category I credit.

In the spring of 1989, the society participated in the local cancer society's "Daffodil Days." This resulted in approximately \$800 in contributions to the American Cancer Society. In May 1989, Dr. Gometz attended the Kansas Medical Society Annual Meeting as our delegate. On September 28, Dr. Roger Warren, President of KMS, attended our meeting and presented us with information regarding the KMS. At the October meeting, the Society decided to continue our membership in Mid-America, the regional industrial development organization.

The election of officers was held in November 1989, with the following results:

President, Dr. Robert Searle;

Vice President, Dr. Don Holsinger; and

Secretary/Treasurer, Dr. Fred Tweet.

Bourbon County. The Bourbon County Medical Society has had a good year and has continued with the monthly evening education meetings.

A new pediatrician, Dr. Shaw, has located in Fort Scott. Dr. Shaw received her training at KU Med Center. She is associated with the Newman-Young Clinic and Dr. James Thornton.

Labette County. The county medical society had an outstanding, active, monthly CME program, with the participation of visiting faculties. The Society was especially honored by the visit and lecture of Helmut G. Schrott, M.D., of the University of Iowa at Iowa City.

A basic neonatal resuscitation course was offered in November, a BCLS course in February and an ACLS course in March.

Dr. Paul attended the Kansas Medical Society Legislative Committee meeting in January 1990.
Modesto S. Gometz, M.D., *Councilor*

DISTRICT 5

Riley County. Last year began with the incorporation of new bylaws for the Riley County Medical Society, as outlined by the Kansas Medical Society. The new bylaws allowed a better definition, structure and purpose for the local society. The new bylaws also outline a structure for the filing of complaints, grievances and recourse for hearing of those complaints.

In June 1989, the Riley County Medical Society had another annual recruitment picnic. A portion of the picnic was funded by the rebate from the combined membership. This event was attended by new physicians starting practice in the area and was a vehicle for introducing the Riley County Medical Society to both prospective and previous members.

This year we were fortunate in having several new physicians in the community who were able to give us educational updates on specialty medical care. Another meeting of significant interest dealt with Colonel Parry, Commander of Irwin Army Hospital, who gave us an update on the changing status and mission of the Army Medical Corps. This was a very beneficial meeting for our district, as this meeting certainly fostered strengthening the relationship between military and civilian medicine. During the past year we have also had programs dealing with our local representatives, Senator Lana Oleen and Representatives Sheila Hochhauser and Katha Hurt. During the course of those meetings, various concerns were discussed in detail: the cost of malpractice insurance; availability of health care in rural Kansas in both the primary and specialty fields; the problems of the non-insured and the medically indigent; and the availability and affordability of nursing and health care-supported staff.

The new year began with our newly elected membership: President, Dr. Anne Wigglesworth; Vice-President, Dr. Mike Sheffield; Secretary-Treasurer, Dr. Harold Henning; and Professional Practices Review Committee, Chairman (3rd year) Dr. Charles H. Crane, Dr. Lou Klobasa (2nd year), and Dr. Peggy Peterson (1st year). Delegates for this year are Dr. Rex Fischer and Dr. Joe Philipp. Alternate delegates are Doctors Charles H. Crane and Doug Hinkin.

The Riley County Medical Society looks forward to another productive year, hopefully increasing and strengthening our membership and striving to help maintain a good relationship between our community and the physicians and suppliers of healthcare in the district.

Clay County. The Clay County Medical Society consists of five family physicians and one general surgeon who meet on a monthly basis as part of medical staff meetings. Our hospital staff officers also hold the same position as our County Medical Society officers. This is done for convenience. We have no activity to report at this date. We are proud to be 100% members of KMS and 100% insured by the KaMMCO Insurance Company. Even though we are somewhat isolated and not all active with the KMS, we all support KMS and its endeavors.

John M. Barlow, M.D.
Jimmie L. Browning, M.D.

DISTRICT 6

The 6th council district of the Kansas Medical Society is composed of the members of Shawnee County Medical Society. Our President this year has been M. Morgan Hostetter, M.D., an obstetrician/gynecologist in Topeka. Throughout the year, Dr. Hostetter has scheduled a variety of informative and entertaining programs for the monthly meetings in an attempt to bolster flagging meeting attendance. The year began in June with our annual meeting, at which KMS President Roger Warren, M.D., was the guest speaker. Other important meetings throughout the year have featured the following topics: the work of the Healing Arts Board of Kansas and the KMS Impaired Physicians Committee; the plight of the homeless in Topeka and Shawnee County; and a special seminar presented by the Auxiliary concerning sibling relations. The membership was also treated to some entertaining meetings, including a Westboro garden supper in August and a magic show in January.

Throughout the year, Shawnee County continued to be a test site for the Blue Cross/Blue Shield Caring Program for Children. Our liaison committee for this program has been available as necessary for consultation with BC/BS.

The past year has been one of increased growth for Shawnee County. Our records reflect an all-time high membership of 359. We mourn the loss of three of our members this past year:

Spencer Boyd, M.D.
John McClellan, M.D.
B. M. Marshall, M.D.

The Shawnee County Medical Society continues to operate its physician referral service, handling approximately 400 calls per month. The service is now computerized and contains a greater amount of data on physician members, retrievable in a short time.

Robert D. Durst, Jr., M.D., *Councilor*

DISTRICT 7

The Flint Hills Medical Society held the customary nine meetings during the past year. We were especially pleased to host Dr. Roger Warren, KMS President, at our November meeting.

Our 1990 officers are John H. Steves, M.D., President; Douglas J. Amend, M.D., Vice-President; A.N. Raju, M.D., Secretary-Treasurer; and Michael L. Montgomery, M.D., Program Chairman.

Additions to our medical society include John H. Bernard, M.D., family practice; and Joel Horning, M.D., family practice. Norman A. Fordyce, M.D., ENT, began practice in Emporia in mid-April. We were saddened by the death of our retired physician member Kenneth Hunter, M.D., of Lebo.

Several physicians hold special positions of responsibility over and above their many time-consuming commitments to hospital staff and committee duties. Chester W. Stone, M.D., serves as coroner. Kendall Wright, M.D., is the physician director of the Lyon County Health Department. James N. Glenn, M.D., serves on the board of directors of Newman Memorial County Hospital, while David J. Edwards, M.D., and James Geitz, M.D., serve on the board of directors of Saint Mary's Health Center. John P. Brockhouse, M.D., is a KMS representative to the AMA House of Delegates.

The membership has been pleased to see the formation of KaMMCO and has high hopes for its continued success. We are also especially grateful for the ever-present support of the superb KMS staff and for its vigilance in legislative matters. Please continue to stress the "golden rule" principle as it relates to health care: we strive to provide health care as we would wish to have it provided to us.

David J. Edwards, M.D., *Councilor*

DISTRICT 8

Our activity this year was highlighted by the visit in October 1989 by KMS President Roger Warren, M.D. Dr. Warren explained the objectives and items on his agenda for the year and also several aspects of the KaMMCO insurance program.

There has been little dialogue with the Butler-Greenwood Society, but they were invited to the Annual Meeting of District 8. The Cowley County Medical Society holds monthly meetings and has a scientific program sponsored by the Wichita branch of KUMC or by a pharmaceutical company.

We still do not have our membership up to the pre-unification level. We are striving to enroll every physician in Cowley County, but so far we have not been successful. After the question of unified membership comes up at the May meeting of KMS, dialogue between physicians of the entire Council District may increase.

Newton C. Smith, M.D., *Councilor*

DISTRICT 10

District 10, representing Harvey, Reno, Rice, McPherson and Marion counties, met on November 6, 1989. The meeting was held at the Sand Tree Restaurant and Bar in Hutchinson. Dr. Roger Warren, President of KMS, and his wife, Dr. Linda Warren, were present, along with KMS Executive Director Jerry Slaughter. Dr. Warren talked about the status of medicine and legislative issues in Kansas. Jerry Slaughter discussed the success of KaMMCO and answered questions.

William R. Beck, M.D., *Councilor*

DISTRICT 11

Our local society has begun preliminary discussions with area hospital representatives regarding developing a coordinated, centralized information verification program.

The WPPA (Wichita Preferred Provider Association) is now working with five counties, twelve hospitals, six outpatient surgery centers and 689 physicians. They have under contract 355 employee groups, representing 32,000 employees and dependents.

Sedgwick County's medical review foundation continues to perform preadmission, and concur-

rent review for nine different companies and insurance carriers.

There have been increased contacts with program directors of free community medical clinics to increase physician participation in the staffing of these clinics, and the problem of these physicians' malpractice insurance is being addressed in the state legislature.

The MSSC assisted Blue Cross/Blue Shield of Kansas in implementing the Caring Program for Children in Sedgwick County. Currently all of the area hospitals and 394 physicians have agreed to participate in this program.

The MSSC's EMS Physician's Advisory Committee, through the cooperative efforts of the three area hospitals providing trauma services and the Sedgwick County EMS, have developed a community-wide trauma registry. A coordinated transport diversion program has also been initiated. The community is beginning a six-month study to evaluate the benefits of using MAST trousers.

Several Sedgwick County physicians are participating in the national chronic fatigue syndrome surveillance and follow-up program, and the MSSC board of directors is supporting a community drug abuse prevention program.

In May, the Wichita dermatologists held a free skin cancer screening clinic, at which 237 people were seen. Of these, 81 were found to have precancerous or cancerous skin conditions.

Clifton C. Schopf, M.D., *Councilor*

DISTRICT 12

Many changes occurred during 1989-90 for physicians of the Ninnescah society.

Rick Friesen, M.D., established a family practice in association with Tim Pauly, M.D. Robert Ward, M.D., discontinued private practice and now covers the Pratt Regional Medical Center emergency room each weekend — a "full-time job."

Arteriography, angioplasty and other interventional procedures are now available in our community. Other specialty services that are now available locally include consultations in cardiology, orthopedics, ophthalmology and oncology. In June mobile MRI services will begin weekly at the regional medical center. Our OB committee has developed and instituted protocols for vaginal birth after cesarean section (VBAC).

On a lighter note, Dr. and Mrs. Patrick Barker

A GLOBAL EXPERIENCE

As a parent of young men and women of high school age, your choice of an educational institution can be critical in determining the future they will have in what is fast becoming a "global village."

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and a partner have reopened the Barron Theater in Pratt.

Theil Bloom, M.D., *Councilor*

DISTRICT 13

This year we saw the retirement from active practice of Dr. I. H. Mattick, orthopedic surgeon, and Dr. Eugene T. Siler, ophthalmologist. Drs. Russell E. Cramm, Rick Kellerman, Mickey Myrick, Yanyong Prakalapakorn and Hugh Wiegman left the district to practice elsewhere. New arrivals in the area are Drs. Woods, McDonald, Callahan, Kelly, Brown and Kepka.

In the fall, the 13th district had its annual dinner for the KMS President. It was well attended, and we heard remarks on joint membership, medical malpractice reform, tort reform and malpractice insurance. Our April meeting was a planning session in preparation for the KMS annual meeting. Resolutions were reviewed and delegates selected.

Victor M. Eddy, M.D., *Councilor*

DISTRICT 15

Greetings from the "clean air country." This has been a beautiful year from the standpoint of weather. We had two perfect snows, a fairly mild winter, moisture when we needed it, and the wheat looks great (so far). There is no air pollution unless you count dirt, and little wind (comparatively speaking).

The 15th council district has been fairly quiet since my last report. There seems to be an uneasy truce regarding medical liability issues. Recruitment of physicians is becoming more acute, due to the fact that several of us who have considerable tenure are either retiring or thinking about it. Many areas will be underserved once these retirements take place, but will not be so designated until after the fact. This is going to create havoc for these towns until they find a replacement.

Kansas risk management law is beginning to pervade our hospital medical staffs. Required categorization of every adverse effect in medicine is being viewed as punitive and dampens good scientific discussion; a good idea gone bad.

There is also considerable suspicion regarding physicians' profiles being collected by Blue Cross/Blue Shield and others. The question is, of course, what is going to be the eventual use of this information?

We are looking forward to our annual meeting in Colorado Springs, not only for the scientific and educational programs, but also to provide input and direction for the Kansas Medical Society.

Clair C. Conard, M.D., *Councilor*

DISTRICT 16

Council District 16 wishes to thank our Kansas Medical Society President, Roger D. Warren, M.D., and the KMS staff for their visit and presentations on October 25, 1989, in Colby. We also thank Bruce Colson for providing us with the afternoon scientific program that day. Northwest Kansas sorely misses the KU circuit courses, which over the years served us so well. We do appreciate the occasional programs provided by the Western Kansas AHEC.

Health care manpower in our area continues to shrink, and in some places the shortage is critical.

Herman W. Hiesterman, M.D., *Councilor*

DISTRICT 18

In November District 18 had a dinner meeting at the Scipio Supper Club, north of Garnett. There was a good turnout from the Franklin and Anderson county medical societies. Honored guests were KMS President Roger Warren, M.D., and his wife, Linda Warren, M.D. Chip Wheelen represented the Kansas Medical Society staff.

Tort reform, membership and KaMMCO were issues receiving attention at the meeting. Doctors in District 18 share statewide concerns about malpractice. Revenue restraints by third parties, compounded by added time spent responding to review credentialing, and prior authorization requests have made the practice of medicine a veritable maze of conflict. Tort reform and implementation of the resource-based relative value scale offer hope for the future for rural primary-care physicians. But that promise seems distant, given the politically popular tendency to blame high health-care costs on providers.

Robert A. Gollier II, M.D., *Councilor*

This Is How We Helped Change Medicare Legislation.

How Do You Tell Someone On Medicare She's An "Expenditure Target"?



Right now in Washington, a Congressional committee is toying with a new idea.

It's a system of explicit "expenditure targets" for the Medicare program.

The aim of this idea is to cut expenses. The result is that it will cut care.

What it amounts to is nothing less than an elaborate dis-incentive for treatment.

Instead of assuring access to vital health care services, this plan will accomplish the exact opposite. It will lead to the rationing of care.

The system calls for a national yearly target for spending on vital health care

services. And after the target amounts are reached, the services would have to be reduced. This would be a disaster for older people.

Originally, Medicare was a golden promise that was made to all Americans. We ask the Congress to keep the faith of that promise.

American Medical Association



Thanks to AMA efforts on your behalf, House and Senate negotiators recently agreed to significant changes in the Medicare program.

These improvements, for both physicians and patients, were in marked contrast to earlier proposals

called "Expenditure Targets." The AMA felt strongly that Expenditure Targets would have resulted in spending caps for physicians and rationing of care for their Medicare patients.

The AMA believes that this new approach devel-

oped by the Senate Finance Committee is more in line with our goal of improving health care services for all Americans.

We also believe this change in Medicare legislation is beneficial for our member physicians.

American Medical Association



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1990 Annual Meeting of the House of Delegates

Transactions of the 131st Annual Session of the Kansas Medical Society are published in this issue of KANSAS MEDICINE. The resolutions are printed in numerical order following the minutes of the Second House of Delegates session.

The first session of the House of Delegates of the Kansas Medical Society convened on Friday, May 4, 1990, at the Broadmoor Hotel, Colorado Springs, Colorado, beginning at 8:00 a.m. with a joint KMS and KMS Auxiliary opening ceremony. A United States Air Force color guard from Peterson Air Force Base, Colorado Springs, posted the colors to open the meeting.

Ted Lewis, M.D., President of the El Paso County (Colorado) Medical Society, greeted the delegates and welcomed them to Colorado Springs.

Speaker Ivan E. Rhodes, M.D., thanked Dr. Lewis and introduced Lieutenant General Monte Miller, Surgeon General of the United States Air Force, who spoke briefly on the changing medical scene in Kansas since pioneer days and compared the contemporary military and civilian practices of medicine.

Linda D. Warren, M.D., introduced Nancy Dickey, M.D., of Richmond, Texas, who represented the AMA Board of Trustees. Dr. Dickey brought greetings from the AMA and offered some observations on the impending National Practitioner Data Bank, Resource-Based Relative Value Scale and the AMA's newly implemented Health Access America. Noting that the subject of unified membership would be discussed during the KMS House of Delegates, she urged that it be retained.

Dr. Rhodes introduced Norma Skoglund of Roseburg, Oregon, President-Elect of the AMA Auxiliary, who informed the assembled delegates that the Auxiliary's emphases for the year are on volunteerism, physician-community cooperation and adolescent health and crises. She noted that KMS Auxiliary President Joan Tempero is serving on the AMAA Long-Range Planning Committee.

Dr. Rhodes introduced Mrs. Tempero and Joy Bell, who presented checks from 1989 AMA-ERF

fund-raising to William J. Reals, M.D., Dean of UKSM-Wichita, and to James G. Price, M.D., Dean of KUMC-KC. Mrs. Tempero reviewed the activities and achievements of the KMS Auxiliary over the past year. She noted that only one-third of KMS members' spouses are members of the Auxiliary, and that because of declining membership KMSA has lost a delegate to the AMAA. She encouraged KMS members to enroll their spouses. At the conclusion of her talk, Mrs. Tempero was acclaimed with applause and a standing ovation in recognition of her service as 1989-90 KMSA President.

The Speaker introduced Roger D. Warren, M.D., who gave the KMS President's Report:

A year ago I sat among you and listened to the annual report of Dr. Terry Poling for the 1988-89 Kansas Medical Society year. Among the considerable accomplishments of the Kansas Medical Society he detailed was the decision handed down verbally by the Kansas Supreme Court on the Samsel case, having to do with limits on awards for non-economic damages and promising relief on the collateral source rule. The written opinion was expected in the fall of 1989, but came instead in the spring of 1990. Although it is the culmination to date of our efforts with tort reform, there are still to be accomplished changes on contingency fees, progress in the realm of structured settlements and progress in the area of caps on awards, among many others. When for our time, if indeed for any time at all, our activities on these measures will be concluded is uncertain at best. I mention this incident and this area of activity for the Medical Society because it typifies many of our activities which are ongoing and require the attention of the succession of presidents, rather than representing a project for one president.

Because of this, we depend for continuity not only upon each other as elected officials of the Kansas Medical Society, but also upon our staff at the Medical Society office. We are fortunate in Kansas to have one of the best state medical society staffs in the nation. Our lobbying staff of Jerry Slaughter, Chip Wheelen, Jim Gleason and,

as appropriate, members of the Kansas Medical Society selected because of their expertise in a particular legislative area, have done a stellar job of presenting our viewpoints to the Legislature. Jerry Slaughter is an outstanding medical society executive and is widely recognized among his peers for his accomplishments. Val Braun, Susan Ward and Dr. Gray, our editor, have suffered my ministrations on the President's Page in magnificent silence, as I struggled with syntax and grammar. This staff has high regard for the physicians in Kansas, a regard which goes well beyond employer-employee status. They have your interest at heart, they do your bidding at every turn and offer you a symbolic standing ovation, in which, incidentally, I join them.

The speeches to follow mine and the committee reports included in your delegate handbook detail the accomplishments of the 1989-90 Medical Society year. They are truly your accomplishments. I am proud of your efforts on behalf of the Kansas Medical Society, and I am pleased to have as my successor my medical school classmate Joe Meek, who will be an outstanding president.

It remains, therefore, for me to express to you my extreme gratitude for the honor you have vested in me as your president for this past year. Your support, your friendship, your counsel and your selfless devotion to the ideals of this Medical Society through my presidential year will always be one of my most treasured memories.

Following Dr. Warren's talk, the KMS and KMSA delegates accorded him a standing ovation and enthusiastic applause.

The opening ceremony was adjourned at 9:00 a.m.

FIRST SESSION

The first session of the House of Delegates was called to order at 9:14 a.m. by Speaker Ivan E. Rhodes, M.D. The presence of a quorum was announced, and Dr. Rhodes explained the composition of the House, outlined the rules for doing business and stated that the House would follow the *Sturgis Standard Code of Parliamentary Procedure*.

The minutes of the 1989 meeting were approved.

The Speaker ordered distribution of the primary ballots and explained the election process.

The following were appointed tellers for the primary election:

L. Theil Bloom, M.D., Chairman

J. Alan Sanders, M.D.

Newton C. Smith, M.D.

The slate of nominees presented by the Nominating Committee was read:

PRESIDENT ELECT: Larry R. Anderson, M.D., Wellington

FIRST VICE PRESIDENT: Richard Meidinger, M.D., Topeka

SECOND VICE PRESIDENT: Joan Sehdev, M.D., Topeka; and Arthur D. Snow, Jr., M.D., Shawnee Mission

TREASURER: Donald R. Brada, M.D., Wichita

CONSTITUTIONAL SECRETARY: Mark G. Bell, M.D., Salina

AMA DELEGATE 1991-92: F. Calvin Bigler, M.D., Garden City

AMA DELEGATE 1991-92: Kermit G. Wedel, M.D., Minneapolis

AMA DELEGATE 1991-92: Stephen F. Miller, M.D., Parsons

AMA ALTERNATE DELEGATE 1991-92: Francis R. Applegate, Jr., M.D., Hays; and Jay S. Schukman, M.D., Great Bend

AMA ALTERNATE DELEGATE 1991-92: John P. Brockhouse, M.D., Emporia; and C. Stewart Reeves, M.D., Fort Scott

AMA ALTERNATE DELEGATE 1991-92: John R. Eplee, M.D., Atchison; and Roger D. Warren, M.D., Hanover

Kenneth L. Derrington, M.D., Vice Speaker, requested reports from officers and committees.

**Constitutional Secretary —
Mark G. Bell, M.D.**

	<i>Year-End 1986</i>	<i>Year-End 1987</i>	<i>Year-End 1988</i>	<i>Year-End 1989</i>
ACTIVE	2,058	1,990	1,934	1,983
ACTIVE 2ND YEAR			74	78
ACTIVE 1st YEAR	17	57	29	26
PROBATIONARY	59	92	68	48
RESIDENT	145	187	277	299
STUDENT	600	605	406	405
ASSOCIATE	30	30	27	32
PERSONAL				
EXEMPT	37	24	28	31
RETIRED	356	393	405	424
MILITARY				
(EXEMPT)	4	2		
EMERITUS	86	75	76	77
HONORARY				1
TOTALS	3,392	3,455	3,324	3,404

Dr. Bell noted that active membership in 1989 was the highest it has been since unified membership commenced. (Year-end 1985 membership was 3,531.)

Treasurer —

Donald R. Brada, M.D.

The written report was distributed.

Necrology Committee —

David E. Gray, M.D.

For the Necrology Committee:

In the words of Nicholas Rowe, 17th century dramatist:

Death is the privilege of human nature
And life without it were not worth the taking.

Since our last meeting, the deaths of these members of the KMS have been recorded:

<i>Name & City</i>	<i>Age</i>	<i>Date</i>
Michael Eli Aronoff, M.D., Olathe	49	9/20/89
Arnold Mark Barnett, M.D., Wichita	53	9/26/85
Anol Willard Beahm, M.D., Great Bend	74	4/1/90
Henry Seavey Blake, M.D., Topeka	78	4/22/90
Mack A. Carter, M.D., Wichita	71	3/4/90
Charles Smith Fleckenstein, M.D., Onaga	81	3/5/89
Charles Theron Hinshaw, M.D., Wichita	89	7/13/89
Edgar Donald Hinshaw, M.D., Arkansas City	73	5/29/89
Kenneth R. Hunter, M.D., Lebo	82	10/16/89
Glenn Alan Lessenden, M.D., Lawrence	65	8/23/89
Joseph G. Lockhart, M.D., Wichita	72	1/18/90
Bromell Moser Marshall, M.D., Topeka	81	6/17/89
John William McClellan, M.D., Topeka	78	8/12/89
Ellis B. McKnight, M.D., Alma	85	11/4/89
Adrian W. Mee, M.D., Olathe	70	12/30/89
Samuel C. Petrie, M.D., Shawnee Mission	61	1/13/89
Carl Wesley Plowman, M.D., Jewell	89	10/10/89
Eldon S. Rich, M.D., Newton	73	4/18/90
Andrew E. Rueb, M.D., Salina	78	2/1/90
LeRoy Wesley Shepard, M.D., Larned	86	8/3/89
Alfred Henry Thiemann, D.O., Sublette	76	3/12/89
Jack W. Welch, M.D., Halstead	70	6/23/89

The Necrology Committee's report was followed by a moment of silence.

Editorial Board —

David E. Gray, M.D., Chairman

The Kansas Medical Society's year is prominently punctuated by this annual gathering to consider the numerous issues confronting it and seek solutions amicable enough to avoid fisticuffs in the aisles. As part of this, the Editorial Board is expected to report on its doings. We are reminded that if spring brings its bounty of flowers and food, it also brings crabgrass. In the 20 years it has fallen my duty to perform this task, I have

recognized that if we can point to any flowers in our garden, we also have to admit the crabgrass is alive and well.

This latter situation is characterized by our perennial problem of advertising revenue. It may be apparent to you that the slenderized version of KANSAS MEDICINE you are receiving these days is the result of advertisers in general, and the large national drug firms in particular, looking the other way. I can offer no better reason than that reported in other years: there are not enough of us as compared with those more populous areas where advertising dollars are deemed to bring better returns.

Our representative for national contracts, the State Medical Journal Advertising Bureau, has cast about for an agency that can solve the problem, since we are not alone in facing stringent times. Currently, a new agency has taken on the task with suitable fanfare but we wait to see, since we have heard it before. Not to neglect the flowers, however, we appreciate the advertisers we do have all the more.

Advertising aside, we make our annual obeisance to the Executive Committee, the Council and the membership generally for sustaining us. Our business manager, of course, has an inside track with all, so it's only politic to thank him as well.

These fealties accomplished, we can turn to Board activities, prominent among which is our continuing encouragement to would-be authors to keep us busy. We have looked particularly to younger members, including residents. Older members will recall that one of the changes in medicine has been the opening of medical pages to authors other than physicians as the overall changes in practice have brought the need for allied medical, even non-medical, subjects to be addressed. Our pages have already reflected this, proving again that those things once rejected can be of value after all. Meantime, we thank those who have submitted their work in the past since they, after all, are our reason for being.

With an appropriate mixture of regret and pleasure, I wish to report one change in the Board. Robert Manning, who has served so well as the Board's representative at the Wichita branch of the medical school, has resigned, and the thanks of the Board and staff go with him. Replacement, however, was readily accomplished, since Don Vine has agreed to assume the responsibilities of that position. His "Cardiology Notes" have been a valued feature of the journal for more than a

year. We look forward to his input in other areas as well.

We presume you have noted changes in the format and typeface of KANSAS MEDICINE. The new look is the work of our production editor, Susan Ward, and I add that to the list of things for which I am grateful — including giving me desk space in her office. And I have said it before but can't say it too often — thanks, Val.

On which note, I now extend to our President the Editorial Board's gift of a bound copy of KANSAS MEDICINE, which should give the Warren household more copies of that publication than they know what to do with.

Accompanied by applause, Dr. Gray presented Dr. Warren's bound volume, and Dr. Warren told Dr. Gray that his own bound volume awaited him in Topeka.

Legislative/Professional Liability/KaMMCO — Jimmie A. Gleason, M.D.

Dr. Gleason praised the hard work of lobbyist Lori Callahan during the year. He noted that the National Practitioner Data Bank will probably start up in December or January and will require close observation. Reporting on the first year of operation of KaMMCO, Dr. Gleason expressed appreciation for Velma Pollock's services. He reported that 459 physicians are now insured with KaMMCO, and that number is likely to increase rapidly. He is looking forward to the company's growth. He reported that KaMMCO will continue to fight nuisance suits, and that the company will sponsor a risk seminar this summer or fall. Dr. Gleason noted that other carriers are now lowering their premiums, due in part to competition from KaMMCO. Also, the new risk surcharges have been announced by the Kansas Insurance Department, and they are lower than last year's.

KaMPAC —

James A. Loeffler, M.D., Chairman

Dr. Loeffler observed that 1990, an election year, is an especially busy one for KaMPAC, but he added that daily monitoring of government agencies and the Legislature is always necessary. Demands on finances are becoming greater for candidates running for seats in the Legislature, and he asked KMS members for their continued financial support for KaMPAC/AMPAC.

Impaired Physicians Committee —

Merle A. Hodges, M.D., Chairman

Dr. Hodges thanked Dr. Roger Warren and the KMS staff for their support. He noted that the program's statistics have doubled during the past year, revealing a more pervasive problem than he had expected. Dr. Hodges is working on a medical school campus program and thanked Dr. Meek for his support. Four symposia will be presented in the fall on "Your Right to Prescribe — Protect It." Dr. Hodges offered to visit county medical societies to make presentations and closed with a warning regarding the probability of mandatory drug testing.

Kansas Foundation for Medical Care —

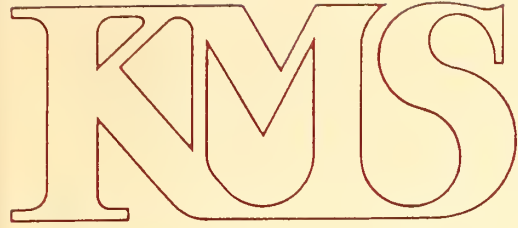
Alex Scott, M.D., President

(Dr. Jay Schukman, the new president of KFMC, gave Dr. Scott's report.)

Organizations, not unlike individuals, seek stability as a desirable condition in which to work. The Kansas Foundation for Medical Care has tried to achieve this condition and has in many ways succeeded. Long-term contracts, i.e., more than one year, have been negotiated with our clients.

The organization is in the early phase of a three-year contract with the Health Care Financing Administration (HCFA) for Medicare and CHAMPUS and a five-year contract with Kansas Social and Rehabilitation Services for Medicaid. This has allowed some long-range planning to a degree never before available. More physicians have volunteered and been trained as reviewers. We are always looking for additional reviewing physicians. If any of you or your colleagues are interested, please contact our Topeka office. This strengthens the liaison with hospitals and has had a beneficial effect on the hospitals where physicians are on the medical staff. We have expanded the physician and hospital provider forums. These were used by the Medical Director, Dr. Rex Stone, to make the entire review process understandable. There were some long days for Dr. Stone, but he did his work well, primarily because he had sifted through regulations and acquired the ability to read and understand the language of the Federal Register. It was with great regret that KFMC accepted Dr. Stone's resignation due to health reasons. A resolution is proposed by the Executive Committee recognizing Rex's diligent efforts. We ask for your support.

We have had stability in the office of the Chief Executive Officer, and he has had some very fine



KANSAS MEDICAL SOCIETY Newsletter

JUNE 1990

1300 Topeka Ave. • Topeka, Kansas 66612 • (913) 235-2383

SELECTED BILLS PASSED BY THE 1990 LEGISLATURE

SB 180 requires the Department of Social and Rehabilitation Services (SRS) to establish a drug utilization review program for analysis of medications prescribed for Medical Assistance Program (Medicaid) patients. In addition, a study to be funded by the Pharmaceutical Manufacturers Association is to analyze the cost/benefit ratio of an open versus closed formulary under Medicaid. The new DUR committee supplants the existing committee, which is appointed pursuant to the Secretary's general authority.

SB 431 amends Kansas adoption laws. One of several changes allows the Department of Social and Rehabilitation Services to contact the genetic parents of an adopted child in the event of a health or medical need.

SB 529 requires physicians and laboratory directors to report cases of HIV positivity, but without naming the patient. This bill also broadens the discretionary authority of physicians to inform emergency responders, law enforcement personnel, correctional officers and uninformed spouses or other partners of possible exposure to HIV. This is in addition to the existing provision for informing health care personnel of the possibility of exposure. In all cases, persons so informed are bound by strict confidentiality requirements and a criminal penalty is prescribed for any breach of confidentiality.

SB 542 liberalizes somewhat the medical practice requirements for purposes of fulfilling the obligations of scholarships awarded under the Kansas Medical Scholarship Program. This bill went into effect immediately upon publication in the May 3 Kansas Register, in order to be applicable to physicians who complete their residency training this June.

SB 543 allows a physical therapist assistant to initiate therapy after telephone communication with the supervising physical therapist. A physician's order is still required before the physical therapist can authorize initiation of therapy.

SB 552 clarifies that all laboratories which conduct prenatal tests for syphilis, HIV or schedule I and II controlled substances shall be subject to regulation by the Department of Health and Environment and therefore must meet standards adopted by the department.

SB 561 establishes a teacher scholarship program for college students who enroll in a course of instruction leading to a degree that will enable the person to teach in a discipline in which there exists a critical shortage of teachers. The program is intended to provide more teachers in mathematics and science.

SB 736 defines "charitable health care provider" as a physician or other provider who enters into an agreement with the Secretary of Health and Environment to provide health care services to medically indigent patients at no charge. In return, the state assumes liability on behalf of the provider when he or she renders care to patients who meet the criteria for medical indigency status. This bill was requested by the Kansas Medical Society primarily to provide liability protection to retired physicians with exempt licenses who desire to donate services at charity clinics. The limited liability can be applied to actively practicing physicians as well as exempt licensees.

SB 747 denies coverage under the Health Care Stabilization Fund when alleged malpractice is the result of sexual misconduct. This change allows commercial medical liability companies to deny such coverage as well. The physician or other provider must be defended by the insurer, but if it is determined that the provider was guilty of sexual misconduct, then defense costs may be recovered by the insurer.

SB 757 allows mutual medical malpractice insurance companies (KaMMCO) to administer the Health Care Providers Insurance Availability Plan (JUA). This bill went into effect upon publication in the March 29 Kansas Register in order to allow KaMMCO to compete for the contract, which was awarded April 7. KaMMCO will commence administration of the Providers Plan on July 1.

SB 776 establishes penalties for interfering with research or otherwise damaging animal facilities. The bill was requested in an effort to forestall incidents such as those which have resulted in damage to animal research facilities in other states.

HB 2586 establishes coordination of state psychiatric hospitals and community mental health centers by delegating a "gatekeeper" function to the CMHCs. After a person has been diagnosed as mentally ill by a physician or a licensed psychologist, the CMHC staff will assess the availability of community-based services for the patient prior to a determination as to whether the patient should be admitted to a state hospital. Consistent with federal law, community-based services shall be preferred.

HB 2609 establishes a 12-member legislative Joint Committee on Health Care Decisions for the 1990s. Among other duties, the committee is to address public policy priorities appropriate for health care in Kansas. This bill was recommended by the Commission on Access to Services for the Medically Indigent and Homeless, which expires this year.

HB 2610 creates an incentive for small businesses (25 or fewer employees without employer-provided health insurance) to contribute to provision of health insurance for employees. If the employer qualifies, a special tax credit is available for five years.

HB 2689 suspends the 10-year statute of limitations for prod-

uct liability claims when a latent disease (asbestosis) is caused by a harmful material.

HB 2755 requires at least one osteopath, one chiropractor and one allopathic physician, on the Blue Cross/Blue Shield Board of Directors. Current law requires a physician and a hospital trustee or administrator to be on the Board.

HB 2915 requires all hospitals to screen newborn infants for potential hearing impairment. If an infant is determined to be at higher than normal risk for hearing impairment, the parents, primary care physician and the Secretary of Health and Environment must be notified.

HB 2936 corrects an inappropriate definition in the Workers Compensation Act which identifies chiropractors, dentists, optometrists and podiatrists as "physicians." The phrase "health care provider" is used in the amended law and, of course, includes persons licensed to practice medicine and surgery as well as the others.

HB 3069 requires development of a schedule of fees for health care services covered under workers compensation insurance. Any schedule of fees must be approved by an eight-member panel consisting primarily of representatives of health care professions. The bill also calls for utilization review by peers in each respective profession.

HB 3090 provides for state indemnification of medical residents who train at affiliates of the KU School of Medicine. Current law self-insures only those who train at KUMC.

HCR 5041 designates October 7-13, 1990 as Mental Illness Awareness Week.

SELECTED BILLS NOT PASSED IN 1990

SB 129--to require notification of a parent by the physician prior to performing an abortion on a minor.

SB 286--to allow court-ordered, involuntary testing for HIV.

SB 396--to allow subrogation under contracts for accident and health insurance.

SB 402--to require that physicians and other health professionals obtain a separate license to treat patients for alcoholism or drug addiction.

SB 425--to define a new crime of sexual exploitation, which would apply only to physicians and other providers of mental health services.

SB 460--to liberalize eligibility criteria for pregnant women and infant children under Medicaid.

SB 523--to allow court-ordered, involuntary testing for infectious diseases.

SB 524--to increase the amount of damages that could be awarded in tort claims for wrongful death.

SB 525--to allow accrual of pre-judgment interest in tort cases.

SB 536--to allow a physician to file a statement in cases to determine whether parental rights should be terminated.

SB 549--to impose a special tax on life insurance premiums to finance grants for Emergency Medical Services.

SB 613--to provide immunity from liability to health care providers rendering care during or immediately following a disaster.

SB 656 and HB 3001--to impose the state sales tax on all services, including health care.

SB 671--to prohibit arranging surrogate motherhood contracts.

SB 675--to create a health data commission and fund its operations through assessments on health care professionals.

SB 745--to define "psychopathic personality" as a severe mental disorder under the treatment act for the mentally ill.

SB 753--to make the penalties for violation of the Healing Arts Act more stringent.

SB 760--to require certification of utilization review organizations and impose standards on such agencies. This bill has been recommended as a topic for a legislative interim study.

SCR 1648--to allow voters to amend the constitution in order to reduce the assessment of property owned by small businesses.

HB 2595--to clarify the relationship between physician assistants and physicians who assume responsibility for PAs.

HB 2842--to require safety belts in all new school buses purchased.

HB 2889--to repeal mandated health insurance benefits.

HB 3012--to require the Commissioner of Insurance to regulate premiums for all group health insurance policies.

HB 3036--to include aggravation by medical treatment as a compensible injury under workers compensation.

HB 3043--to increase compensation paid to members of malpractice screening panels.

HB 3051--to allow physicians to attach liens to damages recovered by a person treated for accidental injuries.

HCR 5046--to direct agencies which license health professionals to require training in sexual ethics as a condition of licensure.

HCR 5050--to urge Congress to provide universal access to basic health care for all citizens.

INTERIM STUDY OF UTILIZATION REVIEW

On June 1, the Legislative Coordinating Council decided which topics will be studied by special interim committees of the Legislature. The one study requested by the Kansas Medical Society was endorsed by the LCC and assigned to a public health committee. The study will consider the need for legislation to regulate private agencies that conduct reviews of the necessity of medical procedures on behalf of employers or insurance programs.

The 1990 Special Committee on Public Health will also study:

- * the need for establishment of a statewide health data system,
- * medical assistance for pregnant women and infant children,
- * funding of local public health departments,
- * strategies for addressing drug abuse,
- * the need to re-establish a program for state financial support for end-stage renal dialysis, and
- * whether marriage and family therapists should be registered by the state.

A comprehensive study of all aspects of accident and health insurance will be undertaken by an interim insurance committee, and an interim appropriations committee will study the mission, activities and financing of the Kansas University Medical Center.

In addition to the various topics assigned to interim committees, the Coordinating Council decided to establish a special task force on SRS. This panel will include a few non-legislators as well as senators and representatives. It will focus on the structure and financing of the Department of Social and Rehabilitation Services while analyzing the vast array of programs administered by the Department.

These special committees are selected annually to supplement standing joint committees of the Legislature, which are statutorily authorized to meet year-round. A new committee, created this year, is the Joint Committee on Health Care Decisions for the 1990s, which becomes statutory on July 1.

The Health Care Stabilization Fund Oversight Committee was created by the 1989 Legislature and will resume its deliberations later this summer upon receiving a report from an actuarial firm which is under contract. The HCSF Oversight Committee's task is to recommend to the 1991 Legislature how to phase out the Fund, commencing July 1, 1991.

LICENSE RENEWALS

As reported in the April newsletter, physicians' license renewals are due by June 30, 1990. There may be a delay of two to four weeks in the mailing of receipt cards, however, according to the Board of Healing Arts. The recent installation of a new computer system has resulted in some problems. The Board requests your patience while work is completed on their system.

LAX LETTERING: LOSEC OR LASIX?

A letter in the June 7 issue of The New England Journal of Medicine warns of confusion that has resulted from the similar brand names of a new drug, Losec (omeprazole), and

Lasix (furosemide). In two separate incidents, one patient received Losec and another Lasix when each should have received the other drug. The authors note that not only do the names look similar, especially when handwriting is poor, but the dosage and administration may be identical (e.g., 20 mg daily by mouth). To avoid confusion, the authors suggest referring to Losec as omeprazole when prescribing it.

CONGRATULATIONS

...To Rex R. Fischer, M.D., Manhattan, who was recently elected chairman of the 15-member Blue Cross and Blue Shield of Kansas Board of Directors;

...To Kent E. Palmberg, M.D., Topeka, who was re-elected to serve a three-year term as a representative at Blue Cross and Blue Shield of Kansas;

...To Ralph H. "Scott" Weber, M.D., Topeka, who has been named vice president of medical affairs for Blue Cross and Blue Shield of Kansas. Dr. Weber practiced in Salina until 1988.

CALL FOR ABSTRACTS

Abstracts for papers are sought for the conference "Early Intervention: Reducing Pressure Ulcer Risk Factors," to be held March 6-8, 1991. Abstracts are due by August 15, 1990. Call 716-831-2143 for an author kit.

EPIDEMIOLOGY TRAINING FROM USPHS

Applications are being accepted through August 31, 1990 for the 1991 U.S. Public Health Service Epidemiology Training Program, which will begin about July 1, 1991. For most trainees, this is a three-year program. Besides an M.D. or D.O., applicants must have U.S. citizenship as of July 1, 1991, and be eligible for acceptance at an accredited university offering an M.P.H. or equivalent, or more advanced public health degree (for the first year of the program). For more information, send a postcard with your name and address to NIH Training Center, Epidemiology Training Program, EPS/100, 9000 Rockville Pike, Bethesda, MD 20892.

LEUKEMIA RESEARCH GRANTS

The Leukemia Society of America is accepting applications for 1991 grants to encourage research at both the basic science and clinical levels in the fields of leukemia and related diseases. For information, write to Research Grant Coordinator, The Leukemia Society of America, 733 Third Avenue, New York, New York 10017.

PROFESSIONAL PATIENT

A 48-year-old male Caucasian patient is reported to be "physician shopping" for painkillers, primarily Darvocet-N. He is 5'9" tall and weighs about 147 pounds. He has circulated mainly in southeast Kansas, complaining of shoulder pain attributed to injuries sustained during the Vietnam conflict.

Apparently, he was, in fact, injured in an industrial accident. As a result, he has had surgery. This professional patient may use the name Roger Harlow.

SPECIAL SUPPLEMENT: MEDICARE AND MEDICAID

MEDICARE MANDATORY CLAIM SUBMISSION NOTIFICATION

All physicians have just received a Medicare notice regarding mandatory submission of Medicare claims, including non-assigned claims, that becomes effective September 1, 1990. Please note that no fees for claim submission may be assessed, and that assigned claims filed more than one year from the date of service are subject to a 10% payment reduction.

The schedule for billing workshops to assist your staff is included in the Medicare packet, together with the fiscal year 1991 Medicare Volume Performance Standard (MVPS). Recommended rates of increase of 8.7% for surgery and 10.5% for non-surgery are subject to adjustment up or down, depending on actual expenditures in fiscal year 1990. Please read this notice carefully and contact KMS Director of Health Care Finance Carolyn Counts, at 800-332-0156 or 913-235-2383, with any questions.

MEDICAID PROGRAM CHANGES

MediKan Changes on Hold. As a result of an injunction issued May 30, 1990, changes in the MediKan program scheduled to become effective June 1 are on hold. The changes that are pending under the injunction are:

Limitation of MediKan recipients to a total of three office visits per fiscal year. These would be paid under a global fee schedule, and payment would include lab, radiology, injections, supplies and surgical procedures. The global reimbursement for each such visit is scheduled to be set at \$70 and would have to be billed at that amount or more. If less is billed, less is paid.

Two visits in addition to those above would be allowed at the request of SRS for disabled patients, to determine and/or verify disability. The target global fee for the first disability visit would be \$70, the second \$25. SRS would encourage physicians, if the injunction is lifted and this becomes effective, to bill the MediKan patient for minor office visits and to utilize the SRS visits for more comprehensive services, and to verify that there are visits remaining.

If these changes are implemented, there will be no payment to hospitals for MediKan services, either inpatient or outpatient, and physician services would be limited totally to the above visits. Pharmacy visits would continue unchanged.

KFMC "MEDICAL BACK"

Kansas Foundation for Medical Care (KFMC) is focusing on utilization objectives related to medical back admissions and has scheduled a symposium at the Wichita Airport Hilton on July 27 from 8:30 a.m. to 3:00 p.m. Participants' suggestions for modifications to existing criteria will be encouraged following a panel discussion regarding current criteria and issues. This program should be of interest to primary care physicians, orthopedists, neurosurgeons, physiatrists, physicians with chronic pain patients and hospi-

tals. Five category I CME credits will be offered. A registration form will be included in the June KFMC Update. KMS urges physicians to attend and participate.

MEDICAID PROGRAM CHANGES SCHEDULED FOR JULY 1, 1990

Cost-containment efforts have resulted in the following Medicaid program changes, per HB 3088, for fiscal year 1991, which begins July 1, 1990:

- * Additional copayments, except for prescriptions.
- * Elimination of coverage of all sole-source (brand-name) prescription drugs.
- * Reimbursement only for specific drugs when the diagnosis meets established criteria.
- * Maximum rates for procedures priced above the 50th percentile reduced to the 50th, except for specified procedures (OB and pediatric services).
- * Five percent reduction of all physician reimbursement rates, except OBRA 1989 changes (OB and pediatric services) and inpatient hospitals. (No hospital rate increases, however.)
- * Reduction of the Primary Care Network (PCN) case management fee by 33% (to \$2.00).
- * Coverage of mental health services limited to community mental health centers and psychiatric services by physicians.
- * Tightened criteria for psychiatric admissions for children and adults, together with consideration of psychotherapy as content of service of all hospitalizations.
- * Coverage of substance abuse, detoxification only, in general hospitals.
- * Further tightening of criteria for medically necessary diagnostic and surgical procedures (pre-certified procedures).
- * Coverage of liver and heart transplants for children only through the University of Kansas Medical Center.

KANSAS CITY WORKSHOPS

KMS will present two workshops in the Kansas City area to assist with Medicare and Medicaid program changes and concerns. These workshops are tentatively scheduled for August 2 and 3, and are targeted for physicians, office managers and key billing staff. Information will be mailed shortly.

CLARIFICATION OF "ELECTIVE SURGERY"

Medicare requires non-participating physicians who do not accept assignment for an elective surgery to provide the Medicare patient a letter stating the cost of the elective procedure if it is over \$500. Medicare also asks that you obtain the patient's signature on the letter and retain a copy in your files. If this is not done, physicians must refund to the patient any amount paid by the patient over the Medicare allowed amount, or be subject to penalties. Physicians have had experiences in which their definition of "non-elective" did not agree with the carriers'. A clarification from Medicare (Topeka) follows:

"In the judgment of the physician, it is medically prudent to proceed with the specific surgical intervention immediately. Therefore, time does not allow for the patient to receive written notice prior to surgery."

staff people who grew and matured in the organization. Some of them have been sought by other enterprises and at salaries the Foundation could not match or exceed. While this has been inconvenient, it has allowed in-house promotions to well deserving people.

There have been no new sanctions applied this past year. This is a compliment to the medical practitioners of Kansas, and should belie any belief that there is a "quota" for sanction application. It is true that several corrective action plans have been necessary, but no sanctions.

I feel the Presidency of the Foundation will pass on to others more capable than I, and that is progress. I thank the Chief Executive Officer and all the Staff, the Executive Committee, the Board of Directors and the providers of medical care to all Kansans for the considerable satisfaction I have had as President.

Hospital Medical Staff Section — C. Stewart Reeves, M.D., Chairman

Dr. Reeves called the attention of the delegates to the written report of the Model Bylaws Committee, which had been distributed. The HMSS had its annual meeting on March 24 in Wichita. This featured a program on centralized credentialing. Dr. Reeves asked for the delegates' support of Resolution 90-9 (Centralized Credentialing for Hospital Medical Staff). He remarked that the PRO Committee's reviews are fair, but that there is too little flexibility. The problem, he said, is that there is too much review by too few physicians; more physician reviewers are needed. Dr. Reeves reported that the newly established KMS-Fiscal Intermediary Liaison Committee will allow the medical society to formulate HCFA policy decisions. The HMSS meeting in April provided an opportunity to get suggestions from physicians.

Executive Director's Report — Jerry Slaughter

Mr. Slaughter began with some remarks about the legislative session, which was still in progress. He observed that this was the longest session on record and an embarrassment to the state, since the Legislature had not accomplished what it set out to do, having become embroiled in a political battle of wills. Nevertheless, it has been a good year for the Kansas Medical Society, one in which our perseverance was rewarded.

A few highlights of the legislation introduced this session include:

Peer review agency regulation — controversial and opposed by insurers. A special legislative interim study committee will be appointed this summer.

Access to care bill — will offer protection for physicians who provide uncompensated care to the needy.

Fee schedules in Workers Compensation program — in response to a complaint of rising costs from the director of the Workers Compensation Division. The problem seems to be mainly with other providers, and KMS has worked out a compromise which assures physician involvement in the process.

Mr. Slaughter summarized the past year at KMS. He praised Dr. Roger Warren, the Executive Committee and the KMS Council for their dedication. He noted that committee members have been very active and have given generously of their time. One continuing problem, however, has been the lack of young physicians on committees. Mr. Slaughter urged delegates to try to get young physicians to volunteer.

KaMMCO's growth has been very satisfying, the Executive Director said. He thanked Dr. Gleason for his hard work and commented that the new lower insurance premiums can be linked directly to KaMMCO's existence.

Access to care is an increasingly important issue, and a new committee has been formed to address it.

Mr. Slaughter praised the individual staff members of KMS and thanked them for their good work.

On the subject of unified membership, Mr. Slaughter observed that there were strong arguments both for and against. He urged careful consideration of the issue prior to the vote, and encouraged delegates to pull together regardless of the outcome.

In conclusion, Mr. Slaughter noted that 1990 marks the seventeenth year of his tenure at KMS. He said it was a privilege to work with the physicians of Kansas, and he looks forward to the challenges ahead.

The Executive Director's report was received with applause and a standing ovation.

The speaker requested unfinished business and, there being none, entertained new business, reviewing the rules for introducing new resolutions

from the floor. Three resolutions were presented, as follows:

90-35 — Addiction Medicine — Self Designation

90-36 — Annual School Athletic Examinations

90-37 — American Board of Medical Specialties Yellow Pages Listings

The Speaker announced that councilors for the following districts need to be elected: 1, 3, 5, 8, 9, 11, 14 and 16.

Dr. Rhodes reminded the delegates of the programs that would be taking place during the afternoon and evening. He announced that the Reference Committee would be composed of Arthur D. Snow, Jr., M.D., Chairman, Mark G. Bell, M.D., James A. Loeffler, M.D., Stephen F. Miller, M.D., and Stephen J. Tempero, M.D. The Speaker urged the delegates to attend the Reference Committee meeting immediately following this meeting.

SECOND SESSION

The second session of the House of Delegates was called to order by the Speaker, Ivan Rhodes, M.D., at 8:30 a.m. on Saturday, May 5, 1990 at the Broadmoor Hotel, Colorado Springs, Colorado. The Speaker gave some announcements and outlined the rules to be followed during the meeting. A quorum was announced.

KMS Executive Director Jerry Slaughter introduced the following resolution:

RESOLUTION 90-38

Commendation of O. W. "Bud" Wright, AMA Division of Medical Society Relations

WHEREAS, O. W. "Bud" Wright has worked for the American Medical Association for 26 years, and

WHEREAS, Bud, a native Kansan, has been a truly dedicated, conscientious and devoted advocate of organized medicine all these years, and

WHEREAS, Kansas was a part of Bud's territory during most of his tenure with the AMA, during which time Bud has been of invaluable assistance to the KMS Staff, Executive Committee and the Council, and his services exceeded the "call of duty," and

WHEREAS, Bud will be retiring from his AMA position on July 1, 1990; therefore be it

Resolved, That this House of Delegates expresses its appreciation and commends Bud Wright for his excellent service to organized medicine, and be it further

Resolved, That a copy of this resolution be transmitted to the American Medical Association, and to Bud and Mary Wright, with the best wishes of the KMS membership and staff for a happy retirement and future.

The delegates adopted the resolution. As the ballots were distributed for the election of officers, the Speaker announced that the tellers for the second session would be:

L. Theil Bloom, M.D., Chairman

J. Alan Sanders, M.D.

Newton C. Smith, M.D.

While the votes were being counted, the Speaker thanked the Reference Committee for its hard work. Arthur D. Snow, Jr., M.D., Chairman of the Reference Committee, presented the committee's report, and the delegates voted on the resolutions. (Results are printed below.) After all the resolutions had been voted upon, Dr. Snow thanked those who had submitted resolutions and the delegates who had discussed them.

The following election results were announced:

PRESIDENT: Joseph C. Meek, Jr., M.D., Wichita

PRESIDENT ELECT: Larry R. Anderson, M.D., Wellington

FIRST VICE PRESIDENT: Richard Meidinger, M.D., Topeka

SECOND VICE PRESIDENT: Arthur D. Snow, Jr., M.D., Shawnee Mission

CONSTITUTIONAL SECRETARY: MARK G. BELL, M.D., SALINA

TREASURER: DONALD R. BRADA, M.D., WICHITA

AMA DELEGATE 1991-92: F. Calvin Bigler, M.D., Garden City

AMA DELEGATE 1991-92: Kermit G. Wedel, M.D., Minneapolis

AMA DELEGATE 1991-92: Stephen F. Miller, M.D., Parsons

AMA ALTERNATE DELEGATE 1991-92: Jay S. Schukman, M.D., Great Bend

AMA ALTERNATE DELEGATE 1991-92: John P. Brockhouse, M.D., Emporia

AMA ALTERNATE DELEGATE 1991-92: Roger D. Warren, M.D.

SPEAKER: Kenneth L. Derrington, M.D., Shawnee Mission

VICE SPEAKER: Joseph T. Philipp, M.D., Manhattan

Ballots had been distributed for voting on Res-

olution 90-13, Unified Membership, and the results were announced: 82-18, in favor of adoption of the resolution.

The Speaker requested any unfinished business, and a commendation honoring Lieutenant General Monte Miller, Surgeon General of the United States Air Force, was read.

The following resolution was introduced and adopted to recognize the county societies hosting the meeting:

RESOLUTION 90-39

Honoring the Northwest, Southwest and Ford County Medical Societies and Their Auxiliaries

WHEREAS, The Northwest, Southwest and Ford County Medical Societies and their Auxiliaries have admirably hosted the 131st Session of the Kansas Medical Society at the Broadmoor in Colorado Springs, Kansas Territory, circa 1859, and

WHEREAS, Many of the delegates and their spouses had a memorable adventure and challenge in some cases rivaling the pioneers in arriving at the Broadmoor, and

WHEREAS, The term "Springtime in the Rockies" has taken on new meaning for many of us, and

WHEREAS, The golfers had an additional reunion with history by playing on courses in Denver, named for James Denver, former Governor of Kansas Territory; therefore be it

Resolved, That the Kansas Medical Society House of Delegates here assembled show its appreciation to the Northwest, Southwest and Ford County Medical Societies and their Medical Auxiliaries by a standing ovation, and be it further

Resolved, That copies of this resolution be prepared and forwarded to the above mentioned component societies and their auxiliaries.

The Speaker introduced Joseph C. Meek, Jr., M.D., as the new President of the Kansas Medical Society. Dr. Meek asked outgoing President Roger D. Warren, M.D., to come forward and receive an inscribed plaque and gavel in recognition of his superb leadership of the Kansas Medical Society during the past year.

Dr. Warren, in turn, presented a gavel to Dr. Meek with his good wishes for a successful year as KMS President.

The following election results for councilors were announced:

District 1 — Norman W. Berkley, M.D., Seneca

District 3 — Dee W. Bell, M.D., Shawnee Mission

District 5 — Michael A. Sheffield, M.D., Manhattan

District 8 — Newton C. Smith, M.D., Manhattan

District 9 — Ramon W. Schmidt, M.D., Salina

District 11 — Tom E. Kendall, M.D., Wichita (1-year term)

District 14 — Richard Preston, M.D., Great Bend

District 16 — John R. Neuenschwander, M.D., Hoxie

Kenneth L. Derrington, M.D., Shawnee Mission, and Joseph T. Philipp, M.D., Manhattan, were sworn in as Speaker and Vice Speaker, respectively, by Dr. Meek. The President praised outgoing Speaker Ivan E. Rhodes, M.D., for his service.

It was announced that the KMS Council and the KaMMCO Board of Directors would hold meetings immediately following the House of Delegates, and that the next Annual Meeting will be held at the Wichita Marriott, May 2-5, 1991.

The meeting was adjourned at 10:15 a.m.

Resolutions

Those resolutions that were not adopted but were referred for further study or information are so indicated. The resolutions that failed to pass are retained in the official minutes at the executive office, but are not reported here. An asterisk following the resolution number indicates a change in the Constitution and By-Laws.

RESOLUTION 90-1

Expiration of 1985 Resolutions

"Official policies established through resolutions at the House of Delegates shall be in effect for a period of five (5) years, at which time that policy position will be reviewed by the Executive Committee and will expire subject to the approval by the House of Delegates unless superseded or continued by another resolution."

Attached is a copy of the 1985 resolutions which are scheduled to expire this year. Changes in the bylaws shall remain in effect until such time as they are amended by the House of Delegates.

Recommend re-adoption of:

85-2 — DRGs, PRO and KFMC (amended to include other third party review organizations)

85-3 — Provision of Legal and Administrative Services

85-4 — Practice of Medicine by Unlicensed Individuals

85-9 — PRO Regulation

85-10 — Quality Assurance for Hospital Sponsored Programs

85-19 — Kansas State Board of Healing Arts Review Committees

Recommend bylaws remain in effect until amended:

85-14 — Bylaws Changes

85-16 — Kansas Obstetrical Society

HMSS recommends that Resolution 85-8, Conflict Resolution, be referred to the Model Bylaws Committee for study.

Recommend that all other 1985 resolutions expire unless re-adopted by the KMS House of Delegates.

RESOLUTION 90-1A

Kansas State Board of Healing Arts Review Committees for Medicine and Surgery, Osteopathy and Chiropractic

WHEREAS, In accordance with enabling legislation which became effective July 1, 1984, review committees representing medicine and surgery, osteopathy, and chiropractic were established to assist the Healing Arts Board's disciplinary counsel in reviewing matters affecting these groups brought to the Board's attention, and

WHEREAS, The individual review committees, except in a few instances, can make final decisions, thus bypassing the full Board, and

WHEREAS, The Board should receive all reports and recommendations of the individual review committees, and retain full decision-making authority; therefore be it

Resolved, That the Kansas Medical Society initiate appropriate action to assure all decisions of the individual review committees be subject to review and ratification by the full Board of Healing Arts.

RESOLUTION 90-2

Publication of Third Party Payor Review Criteria

Not adopted; referred to the Legislative Committee.

RESOLUTION 90-3*

Pawnee County Medical Society Merger with Barton County

WHEREAS, The active membership of Pawnee County Medical Society now consists of three active members, and

WHEREAS, The Pawnee County Medical Society desires to merge with the Barton County Medical Society, and

WHEREAS, This merger is acceptable to the Barton County Medical Society; therefore be it

Resolved, That the House of Delegates revoke the charter of the Pawnee County Medical Society and attach the entire membership to the Barton County Medical Society.

RESOLUTION 90-4

Group Health Care Insurance

WHEREAS, Premiums for health care insurance continue to rise even more quickly than costs of health care, and

WHEREAS, Physicians are responsible for their own personal family's and office family's health insurance premium costs, and

WHEREAS, KMS works with Blue Cross and Blue Shield of Kansas to offer a group health insurance plan to KMS members, their employees and eligible dependents, and

WHEREAS, The premium paid by each KMS member, their employees and eligible dependents is now based primarily on their own experience, and

WHEREAS, There is a diminishing financial advantage for a KMS member to belong to the current KMS Blue Cross/Blue Shield of Kansas health care plan; therefore be it

Resolved, That the KMS Council study the feasibility of developing a group health care plan for the entire KMS membership which would be rated based on the total group's experience, and be it further

Resolved, That if such a program is determined to be feasible the Council be directed to implement it as soon as possible.

RESOLUTION 90-5

Insurance Coverage Medicare Fines

Not adopted; referred to the Executive Committee.

RESOLUTION 90-6

Commendation of G. Rex Stone, M.D.

WHEREAS, G. Rex Stone, M.D., has been a leader among Kansas physicians in peer review activities and a cornerstone of the Kansas Foundation for Medical Care, Inc., and

WHEREAS, Dr. Stone has served as Medical Director for the Kansas Foundation for Medical Care, Inc. during the last six years, with prior service as an officer and member of the Board of Directors, and

WHEREAS, Dr. Stone has received national recognition for his leadership through his election to the American Medical Peer Review Association Board of Directors and his participation in AMPRA leadership committees, and

WHEREAS, Health reasons have caused Dr. Stone to resign his position as KFMC Medical Director; therefore be it

Resolved, That G. Rex Stone, M.D., receive the recognition and gratitude of the Kansas Medical Society for his personal dedication and leadership in improving the quality of medical care, and be it further

Resolved, That this resolution be placed in the minutes of this 131st Annual Meeting of the Kansas Medical Society, and be it further

Resolved, That this resolution be delivered to Dr. and Mrs. Stone with the best wishes for the future.

RESOLUTION 90-7

Commendation of Dwight Allen

WHEREAS, Dwight Allen, as Executive Director, has devoted 25 years of untiring service to the Medical Society of Sedgwick County, and

WHEREAS, During that time Dwight Allen has contributed significantly to the growth and improvement of organized medicine in Kansas; therefore be it

Resolved, That the Kansas Medical Society commends and expresses its deep appreciation to Dwight Allen for 25 years of service to the physicians of Kansas.

RESOLUTION 90-8

Kansas Foundation for Medical Care — Endorsement

WHEREAS, Continued and active physician involvement is necessary to achieve the intended goals of the Medicare Utilization Review Program; therefore be it

Resolved, That the KMS continue to endorse the Kansas Foundation for Medical Care as the Professional Review Organization for Kansas for the coming year, and be it further

Resolved, That the KMS endorsement be reviewed on an annual basis.

RESOLUTION 90-9

Centralized Credentialing for Hospital Medical Staff

WHEREAS, Programs now exist to provide the medical community with a valuable service that streamlines the costly, cumbersome process of having other sources gather and distribute information on physician credentials, and

WHEREAS, It is imperative that physicians maintain direct input into and control of this process; therefore be it

Resolved, That the Executive Committee study the feasibility of implementing a centralized credentialing information program, and that if such a program is deemed to be possible, that it be implemented as soon as possible.

RESOLUTION 90-10

Peer Review and Risk Management Program for Hospitals

WHEREAS, Resolution 87-19 authorized the KMS to develop a program to assist small hospitals by providing specialty physician consultation when requested, and

WHEREAS, This program has been successfully utilized by various hospitals across the state, and

WHEREAS, Requests have now been received to develop standing peer review and risk management committees for small hospitals as a result of the anti-competitive issues raised in the *Patrick v. Burget* case; therefore be it

Resolved, That the KMS Hospital Medical Staff Section be directed to study and develop a program to assist hospitals in peer review and risk management activities, and be it further

Resolved, That at the conclusion of the study, the HMSS present its recommendations to the Council for consideration and implementation.

RESOLUTION 90-11

Commendation of Wayne Johnston

WHEREAS, Wayne Johnston, a native Kansan, has risen to the top of one of the State's largest and most dynamic corporations, and

WHEREAS, Blue Cross/Blue Shield of Kansas has benefited from his loyal service for almost four decades, and

WHEREAS, Under Wayne Johnston's tenure, Blue Cross/Blue Shield, in an increasingly competitive environment, has grown and is a leading health care insurer in the State, serving more than 775,000 Kansans; therefore be it

Resolved, That the Kansas Medical Society expresses its admiration for Mr. Johnston's efforts in serving the people of Kansas as President and CEO of Blue Cross/Blue Shield, as well as for his participation on numerous Boards and Foundations, and be it further

Resolved, That with a copy of this Resolution to Wayne and Phyllis Johnston also go the best wishes of this House for a fulfilling and happy retirement.

RESOLUTION 90-12

KMS-KaMMCO Office Building Project

WHEREAS, Both the Kansas Medical Society and the Kansas Medical Mutual Insurance Company have outgrown their present facilities, and

WHEREAS, A proposal has been developed to incorporate space for KMS, KaMMCO, meeting facilities and allow for future expansion, and

WHEREAS, KMS would become a partial owner of the building with a financial commitment of up to \$1,500,000; therefore be it

Resolved, That the Executive Committee be authorized to begin a campaign to raise funds for the building project through charitable giving, memorial contributions and gifts; and to recommend to the Council that a building fund assessment of \$25 per member per year be implemented beginning in 1991, and be it further

Resolved, That the Executive Committee be authorized to pursue the implementation of the building project upon completion of negotiations with KaMMCO, tax and legal consultations, and confirmation of the financial feasibility.

RESOLUTION 90-13*

Unified Membership

WHEREAS, We have now had unified mem-

bership for four years, and during that time Wyandotte County has lost over 160 members and KMS has lost over 480 members, mostly due to the mandatory AMA membership. These members who have not renewed have not done so for these reasons: philosophical differences of opinion, economics, and some just simply object to the mandatory aspect, and

WHEREAS, We cannot see that the advantages of unified membership have outweighed the disadvantages, and

WHEREAS, A recent survey conducted by KMS (upon our request to the Council) once again indicated that the majority of physicians in Kansas (77% of those responding to the survey) favor optional AMA membership rather than unified membership, and

WHEREAS, A similar survey conducted by WCMS of the physicians in Wyandotte County yielded basically the same results as above with the additional information that 85% of the non-members responding said they would or probably would join if AMA membership was optional (a potential of 70 new members in Wyandotte County alone), and

WHEREAS, We feel it is now long overdue for the House of Delegates of KMS to be responsive to the desires of its constituency as this is the 3rd survey in the last eight years that has indicated the majority of physicians in Kansas favor optional AMA membership (1982 — 74%; 1987 — 68% and 1990 — 77%); therefore be it

Resolved, That unified membership be repealed, and KMS Bylaws be changed as follows:

Sec. 1143 shall read:

No physician may be an active member of a component society without becoming a member of the Kansas Medical Society and the American Medical Association.

and be it further

Resolved, that KMS and each component society do everything within their power to encourage present members and new members alike to belong to the AMA.

RESOLUTION 90-14

Vaginal Birth After Cesarean Section

WHEREAS, The KMS House of Delegates Resolution 89-22 directed that the Kansas Medical Society, the Kansas Chapter of the American College of Obstetricians and Gynecologists and the Kansas Chapter of the American Academy of Family Physicians cooperatively develop a pro-

gram concerning vaginal birth after cesarean section, and

WHEREAS, The KMS Maternal Health Committee in conjunction with the other above-named groups has studied the issue at hand and has discussed it thoroughly; therefore be it

Resolved, That physicians and hospitals be encouraged to consider the following recommendation:

The Kansas Medical Society, the Kansas Section of the American College of Obstetricians and Gynecologists and the Kansas Chapter of the American Academy of Family Physicians support the concept of allowing a woman with a previous cesarean section to have the opportunity to have a trial of labor to deliver vaginally in a subsequent pregnancy.

They recommend that each hospital and its medical staff develop protocols and guidelines to manage patients undergoing vaginal birth after a previous cesarean section. It is further recommended that the ACOG committee opinion number 64, October 1988, "Guidelines for Vaginal Delivery After a Previous Cesarean Birth" be utilized in developing these guidelines and protocols. The hospitals and staff are also encouraged to be guided by the statements contained in the article "Vaginal Birth After Cesarean Delivery," from *American Family Physician* 1988; 37:167-71.

Resolved, That the Kansas Medical Society's Maternal Health Committee follow up with each Kansas hospital where babies are delivered to determine the acceptance of the recommendations outlined in this resolution and the impact from these recommendations on the overall Kansas cesarean section rate, and be it further

Resolved, That a summary of this follow-up report be submitted to the Kansas Medical Society Council in April of 1991 and to the Kansas Medical Society House of Delegates at their 1991 annual meeting.

RESOLUTION 90-15

Caring Program for Children

WHEREAS, The Kansas Medical Society is dedicated to bettering the health of the people of Kansas, and

WHEREAS, 32,000 Kansas children live in homes with limited family income and have no access to health care insurance and, consequently, suffer from the limited access to health care, and

WHEREAS, The Caring Program for Children

was an initiative created jointly by the Kansas Medical Society, the Kansas Hospital Association and Kansas Blue Cross/Blue Shield, to offer the community an opportunity of providing preventive health care to children with no other insurance access, and

WHEREAS, This program has been endorsed by medical societies, has been well received by physicians and the communities and has provided health insurance for the needy children in the counties of Ellis, Sedgwick and Shawnee; therefore be it

Resolved, That this House of Delegates endorses the continued commitment of the Kansas Medical Society to the Caring Program for Children, and be it further

Resolved, That the KMS Auxiliary be encouraged to explore this program for possible participation in it, and be it further

Resolved, That county medical societies in those counties where this program does not currently exist, consider the local needs and the merits of the program for possible participation in it, and be it further

Resolved, That physicians of Kansas personally and collectively support this program and encourage their local community to become involved.

RESOLUTION 90-16

Substance Abuse

WHEREAS, According to the AMA, substance abuse, both alcohol and illicit drugs, is recognized as a contributing element to some of America's most pressing social problems — crime, disease, poverty and corruption, and

WHEREAS, The Research Triangle Institute estimates that the use of illicit drugs, alcohol and tobacco costs the nation billions of dollars in health care expenditures, lost productivity and crime, and

WHEREAS, The 1988 AMA Board of Trustees Report NNN states that one needed component of a corrective action program addressing substance abuse problems is earlier involvement of physicians in identifying the indicators of alcohol and drug abuse problems; therefore be it

Resolved, That the Kansas Medical Society reaffirm the medical profession's strong opposition to the abuse of alcohol and the use of illicit drugs and tobacco, because of their deleterious effects on human health, and be it further

Resolved, That physicians on an individual basis

be more cognizant of the potential for substance abuse in their evaluation of patients and be encouraged to discuss these problems openly with their patients, and be it further

Resolved, That the Kansas Medical Society strongly support and encourage the Kansas University School of Medicine to initiate and/or strengthen their current efforts to educate medical students and residents regarding the identification, treatment and prevention of substance abuse problems, and be it further

Resolved, That during the coming years, continuing medical education programs for physicians should include topics to inform all practicing physicians regarding the magnitude of substance abuse problems as well as the recognized diagnostic and treatment modalities available in identifying and managing substance abuse problems.

RESOLUTION 90-17

Credentialing of Physicians Associated with Ambulatory Surgery Centers

Not adopted; referred to the Executive Committee.

RESOLUTION 90-18

Licensing of Ambulatory Surgical Centers

Not adopted; referred to the Executive Committee.

RESOLUTION 90-19

(Combined with Resolution 90-4.)

RESOLUTION 90-20

Listing of Board Certification

Not adopted; referred to the Executive Committee.

RESOLUTION 90-21

Patient Access to Medical Records

WHEREAS, The American Medical Association (AMA) Judicial Council's report entitled "Fundamental Elements of the Patient-Physician Relationship" proposes in part that "Patients are also entitled to obtain copies of their medical records . . .," and

WHEREAS, The intent of this proposed change has been interpreted by the Council's staff to mean that "patients do, in fact, have a right to direct access to their medical records, this includes the right to receive a copy of the record from their physician," and

WHEREAS, The Council has recommended that this report be adopted by the AMA House of Delegates at their June 1990 annual meeting, and

WHEREAS, The Medical Society of Sedgwick County's Membership and Ethics Committee and Board of Directors disagree with that portion of the Council's report relating to the patient's access to their medical records; therefore be it

Resolved, That the Kansas Medical Society (KMS) indicate its opposition to the proposed changes relating to direct access to patient medical records and its support for retaining the current wording regarding this subject, as outlined in Section 7.02 of the Ethical and Judicial Council's 1989 Current Opinions, which states in part, ". . . on request of the patient a physician should provide a copy or summary of the record to the patient or to another physician, an attorney, or other person designated by the patient," and be it further

Resolved, That the action of the KMS taken on this matter, as well as the reasons for same, be conveyed to the Society's AMA Delegates, and that this information be presented to the AMA House of Delegates when the Council's full report is deliberated.

RESOLUTION 90-22

Living Will, Power of Attorney for Health Care Decisions, Other "Death with Dignity" Issues

WHEREAS, Physicians are regularly and intimately involved in complex life-and-death decisions concerning the treatment of hopelessly ill patients, and

WHEREAS, The advances in medical technology permit the continuation of life in cases where patients are comatose, unconscious, vegetative or brain dead, and can prolong the process of dying in terminally ill patients, and

WHEREAS, The population served by this technology and cared for by physicians is growing disproportionately older and is increasingly plagued by terminal illness, and

WHEREAS, Although every adult has the freedom to accept or refuse any recommended medical treatment, during severe illness, patients are often unable to communicate their wishes at the very time that critical decisions about medical interventions must be made, and

WHEREAS, Although the Kansas Legislature has enacted statutory forms that allow competent individuals to make some medical treatment decisions or to appoint a proxy decision-maker to

make decisions, these statutory forms are unfamiliar and little used by the public, and

WHEREAS, The issues of treatment of the hopelessly ill patient present serious moral, legal and economic questions to the medical community, the patients, their families and the general public; therefore be it

Resolved, That the Kansas Medical Society assist in conjunction with other involved state organizations in providing leadership in developing and carrying out educational programs to educate the medical community, patients and the public about the statutory choices available in Kansas for medical decision-making, and work to expand the freedom of choice for patients making such decisions.

RESOLUTION 90-23

Hospice Care

WHEREAS, Hospice care is an acceptable and unique form of comprehensive care (physical, emotional, social, spiritual and bereavement services) provided in a home setting for the terminally ill and their families through an interdisciplinary team consisting of physicians, nurses, social workers, home health aides, specially trained volunteers and pastoral counselors, and

WHEREAS, Hospice care is a proven, cost effective method of delivering quality health care to the terminally ill and their families, and

WHEREAS, Since there is a distinctive difference between home health care and Hospice care, Medicare established a special Medicare Hospice Benefit in 1983 as did Kansas Medicaid in 1989, and

WHEREAS, There are eight (8) Medicare certified hospices serving residents in Kansas, and

WHEREAS, In 1989 in Sedgwick County alone, more than 95% of the nearly 22,000 Hospice patient days were provided in the home setting, and in that same year 95% of those nearly 400 patients died at home, never having sought acute care after admission to Hospice, and

WHEREAS, In the last sixty (60) days of those patients' lives, Hospice provided virtually complete coverage for all services at a cost of \$5,000 per patient (including medications, medical supplies, diagnostic procedures, equipment, staff visits and family support, a cost considerably less than would have been incurred had these same services been provided in the acute care hospital setting, therefore be it

Resolved, That in keeping with the Blue Cross/

Blue Shield of Kansas' recently stated philosophy of cost containment that the Kansas Medical Society's Third Party Payor Liaison Committee review in cooperation with Blue Cross/Blue Shield of Kansas, that company's current benefits, coverage and policies relating to Hospice care, and be it further

Resolved, That based on these discussions it be recommended that the appropriate plan changes relating to Hospice care be implemented if such are determined to be cost effective and in the best interest of patient care.

RESOLUTION 90-24

Commendation of Wayne Stratton

WHEREAS, Competent legal assistance is of paramount importance to any well-functioning organization in these times, and

WHEREAS, Wayne T. Stratton, J.D., has functioned as the KMS General Counsel for fifteen (15) years, during which time he has rendered excellent counsel and services to KMS and individual physicians in a highly ethical and competent manner; therefore be it

Resolved, That this House of Delegates acknowledges the important contributions by Wayne Stratton to the efforts of the Kansas Medical Society over these past years, and be it further

Resolved, That a copy of this Resolution be transmitted to Mr. Stratton with an expression of gratitude for his efforts on behalf of the Kansas Medical Society.

RESOLUTION 90-25

Organ Transplantation

WHEREAS, The KMS Committee on Ethical Considerations of Organ Transplantation Under Medicaid was established in response to the KMS House of Delegates Resolution 89-42, which called for the development of an operational policy for transplant procedures under the Kansas Medical Assistance Program, establishment of an ongoing panel of physicians to assess the continuing developments in technology and cost/benefit ratio, to determine the viability of new procedures, and to continue an ongoing liaison with the Medicaid Program, and

WHEREAS, The Committee carefully studied the criteria for transplantation of heart and liver as established by the transplant teams of the Kansas University School of Medicine, and

WHEREAS, There exists an extreme shortage of

available organs, and it is critical that selection of organ recipients be based on good medical outcomes and not on financial savings. Medical necessity rather than any political considerations should govern the selection of candidates for organ transplantation, and

WHEREAS, The public does not fully comprehend all the implications of organ transplantation, and politicians may react to emotional appeals without full consideration of the implications from a medical standpoint; therefore be it

Resolved, That the Kansas Medical Society act as a catalyst to raise awareness on the issues of organ transplantation in Kansas by endorsing the following recommendations:

1) The established criteria for transplantation of heart and liver as utilized by the transplant teams of the Kansas University School of Medicine represent acceptable standards of practice within this state and can serve as guidelines to the Social and Rehabilitation Services in their evaluation of medical necessity for organ transplantation.

2) SRS should continue to utilize experts in the field for any guidance needed in individual cases.

3) A public forum should be called with panelists representing KMS, the legislative leadership, the Governor's Committee on Access to Health Care Services for the Medically Indigent and Homeless, welfare organizations, SRS, clergy and the media; the forum to be keynoted by a medical ethicist.

RESOLUTION 90-26

Resident Physician Services to Local Health Departments

WHEREAS, There exists a need to promote and expand community health services in the State, and

WHEREAS, The local health department clinics are understaffed, and

WHEREAS, There is an increasing patient load in these clinics, due to the growing numbers of the underinsured, uninsured, AIDS and other communicable diseases, and

WHEREAS, Medical residents should be encouraged to develop the professional responsibility in their early days for providing services to the community and the public health sector; therefore be it

Resolved, That the Kansas City and Wichita campuses of the University of Kansas School of Medicine be encouraged to continue the devel-

opment of programs which allow residents to provide services at local health departments, and be it further

Resolved, That the University of Kansas School of Medicine coordinate, with the Kansas Department of Health and Environment, local health departments, and local medical societies, the development of a program to address this need.

SPECIAL RESOLUTION 90-27

Commendation of Representative Marvin L. Littlejohn

WHEREAS, Marvin L. Littlejohn was first elected to the Kansas House of Representatives in 1974, and

WHEREAS, During his sixteen years of public service as a Legislator, Marvin L. Littlejohn has earned the respect of his colleagues as well as many others, and

WHEREAS, As Chairman of the House Public Health and Welfare Committee, Marvin L. Littlejohn has accomplished a great deal toward improving access to quality health care for the people of Kansas, and

WHEREAS, Marvin L. Littlejohn has announced that he will retire from legislative service upon conclusion of his current term of office, and

WHEREAS, Marvin L. Littlejohn will be sadly missed in the Legislature; therefore be it

Resolved, That the Kansas Medical Society recognizes the exemplary public service of Marvin L. Littlejohn and expresses its commendation and appreciation by adoption of this resolution by the House of Delegates assembled at its annual meeting at Colorado Springs, Colorado, May 4, 1990.

RESOLUTION 90-28

Corporal Punishment in Kansas Schools

Not adopted.

RESOLUTION 90-29

Medicare Payment for Influenza Vaccinations

WHEREAS, Annual vaccination is the single most important measure to control infection, and

WHEREAS, Efforts should be made to immunize at least 80% of those in high-risk groups:

- adults with chronic cardiovascular or pulmonary diseases;

- residents of nursing homes and other chronic care facilities

- anyone 65 years or older, and

WHEREAS, Costs associated with treating dis-

eases and conditions contracted as a result of developing influenza exceed the costs of providing the influenza vaccinations; therefore be it

Resolved, That the American Medical Association petition the Congress and the Health Care Finance Administration to modify current law to provide for Medicare payment of influenza vaccinations.

RESOLUTION 90-30

Medical Professional Liability Insurance

Not adopted; referred to the Professional Liability Committee.

RESOLUTION 90-31

Commendation of Representative James D. Braden

WHEREAS, James D. Braden was first elected to the Kansas House of Representatives in 1974, and

WHEREAS, During his sixteen years of public service as a Legislator, James D. Braden has earned the respect of his colleagues, as well as many others, and

WHEREAS, James D. Braden has been chosen by his peers to serve in the highest leadership positions in the Kansas House of Representatives, as Majority Leader and as Speaker of the House, and

WHEREAS, During his tenure as a Legislator, James D. Braden has consistently supported Kansas Medical Society efforts to improve access to quality medical care for all Kansans, and

WHEREAS, James D. Braden has announced that he will retire from legislative service; therefore be it

Resolved, That the Kansas Medical Society commends James D. Braden for his exemplary record of service to the people of Kansas.

RESOLUTION 90-32

Commendation of Representative William W. Bunten

WHEREAS, William W. Bunten was first elected to the Kansas House of Representatives in 1962, and

WHEREAS, During his twenty-eight years of public service as a Legislator, William W. Bunten has earned the respect of his colleagues, as well as many others, and

WHEREAS, As Vice-Chairman and Chairman of the House Appropriations Committee, Wil-

liam W. Bunten has assumed leadership responsibility for some of the most difficult and challenging issues confronting state policymakers, and

WHEREAS, During his tenure as a Legislator, William W. Bunten has been a genuine ally of the Kansas Medical Society, and

WHEREAS, William W. Bunten has announced that he will retire from legislative service upon conclusion of his current term of office; therefore be it

Resolved, That the Kansas Medical Society commends William W. Bunten for his exemplary record of service to the people of Kansas.

RESOLUTION 90-33

Commendation of Representative LeRoy F. Fry

WHEREAS, LeRoy F. Fry was first elected to the Kansas House of Representatives in 1976, and

WHEREAS, During his fourteen years of public service as a Legislator, LeRoy F. Fry has earned the respect of his colleagues, as well as many others, and

WHEREAS, On numerous occasions Leroy F. Fry has supported efforts by the Kansas Medical Society to improve access to quality health care for the people of Kansas, and

WHEREAS, LeRoy F. Fry will be greatly missed in the Legislature; therefore be it

Resolved, That the Kansas Medical Society commends LeRoy F. Fry for his exemplary service to the people of Kansas.

RESOLUTION 90-34

Commendation of Representative Jessie M. Branson

WHEREAS, Jessie M. Branson was first elected to the Kansas House of Representatives in 1980, and

WHEREAS, During her ten years of public service as a Legislator, Jessie M. Branson has earned the respect of her colleagues, as well as many others, and

WHEREAS, As Ranking Minority Member of the House Public Health and Welfare Committee, Jessie M. Branson has accomplished a great deal toward improving access to quality health care for the people of Kansas, and

WHEREAS, Jessie M. Branson also served as Vice-Chair of the Commission on Access to Services for the Medically Indigent and Homeless, and

WHEREAS, Jessie M. Branson is a member of

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George R. Tiller, M.D., DABFP
Medical Director

the Kansas Medical Society Auxiliary, and

WHEREAS, Jessie M. Branson has announced that she will retire from legislative service upon conclusion of her current term of office, and

WHEREAS, Jessie M. Branson will be greatly missed in the Legislature; therefore be it

Resolved, That the Kansas Medical Society commends Jessie M. Branson for her exemplary record of service to the people of Kansas.

RESOLUTION 90-35

Addiction Medicine — Self Designation

Not adopted.

RESOLUTION 90-36

Annual School Athletic Examinations

Referred to the Executive Committee.

RESOLUTION 90-37

American Board of Medical Specialties Yellow Pages Listing

WHEREAS, The American Board of Medical Specialties (ABMS) has recently instituted a National Yellow Pages Listing campaign for ABMS certified physicians only, and

WHEREAS, This listing is voluntary and for a fee, which may lead to a listing which is incomplete for area physicians, and

WHEREAS, The official specialty title (the only allowed listing) is not representative of the true scope of many specialty practices, and often is unfamiliar to the lay public, and

WHEREAS, This listing will omit any mention of subspecialty training certified by individual Boards but not specified by a distinct specialty designation, and will also omit mention of any special interests or skills developed from time in practice, and

WHEREAS, This type of endeavor may further fractionalize the medical community, at the same time confusing the lay public, and

WHEREAS, Several specialty Academies and at least one state society (Florida) have publicly stated opposition to this listing; therefore be it

Resolved, That KMS go on record in opposition to the ABMS national Yellow Pages Listing campaign, and be it further

Resolved, That this resolution be submitted to the AMA for consideration at its upcoming convention.

Resolutions 90-38 and 90-39 appear on pages 170 and 171.

Myasthenia Gravis

KENT B. MURRAY, M.D.,* *Wichita*

Myasthenia gravis is an acquired disorder of neuromuscular transmission. It is the result of a polyclonal IgG response directed against the acetylcholine (ACh) receptors located on the muscle membrane. The cause of this response is not known, but the thymus is necessary for its development, and genetic factors appear to be involved. This paper presents a case and briefly reviews the disorder with emphasis on its manifestation in the elderly.

Case Report

The patient is a 79-year-old white male who presented in 1982 with intermittent diplopia since 1979. He also described episodes in which his eyelids fell with prolonged gaze, requiring a period of rest to return to normal. He had difficulty keeping his arm up when talking on the telephone for prolonged periods, and he reported generalized weakness.

Past medical history was significant for atherosclerotic heart disease with a history of congestive heart failure. In 1975 he had a permanent pacemaker inserted for treatment of severe sinus bradycardia with syncope. There was a history of hypertension.

Physical examination revealed an elderly white male in no distress. The right eye was normal, but examination of the left eye revealed lateral deviation and inability to adduct the eye fully. There was gradual onset of ptosis with sustained upward gaze on the right. Strength was symmetrically diminished in the extremities. The remainder of the neurologic examination was normal.

Routine laboratory work was unremarkable, as were thyroid function tests. CT scan of the mediastinum failed to reveal any evidence of tumor.

An edrophonium (Tensilon) test was performed and was markedly positive, with rapid resolution of ocular signs and symptoms.

The patient was initially treated with pyridos-

stigmine (Mestinon), but at the dose required to ameliorate symptoms unacceptable side effects of excessive lacrimation and abdominal cramping developed. For that reason, prednisone therapy was added to the baseline pyridostigmine therapy in gradually increasing doses. The patient did well on a regimen of pyridostigmine and q.o.d. prednisone for a three-year period. At that point, both medications were gradually tapered and discontinued. He has been followed for four years and remains in remission.

Clinical Manifestations

The clinical manifestations of myasthenia gravis are related to interference with normal ACh-mediated neuromuscular transmission. The primary manifestation is weakness. The weakness is a true decremental muscle power on repetitive effort and should not be confused with lassitude (tiredness or loss of stamina).¹ The rate of onset and the course of the disease are variable.

Ptosis and diplopia due to involvement of the extraocular muscles are the most common initial symptoms. Bulbar muscles may be involved with resultant dysarthria, alterations in characteristics of the voice, choking, or dysphagia. The extremities and trunk may be involved, and when this occurs it may be in any combination and is usually asymmetrical.²

Approximately 90% of myasthenia gravis occurs in adults. In these patients, it may be classified into four types, based on severity and distribution of weakness. Type 1 is characterized by ocular involvement alone (20%). Type 2 is characterized by generalized weakness of variable severity (50%). Type 3 is characterized by acute fulminating disease (11%). Type 4 is late, severe disease (9%).¹

Diagnosis

A commonly used diagnostic test involves the use of edrophonium (Tensilon). Edrophonium is a short-acting acetylcholinesterase inhibitor which increases available ACh and helps overcome the receptor deficiency. Signs of myasthenia gravis are typically improved within 30 to 60 seconds of intravenous edrophonium administration, and

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the improvement persists for several minutes. False positives may result from increased patient effort during the test, and concurrent placebo testing is sometimes done. With that caveat, a strongly positive test is virtually diagnostic of myasthenia gravis.

Classically, electromyography involving repetitive motor nerve stimulation has been used. The electromyographer looks for a decremental response in the muscle. This is a relatively insensitive test and is mainly useful if positive. Its sensitivity is enhanced by testing involved muscles.

A superior electrophysiologic test is single-fiber electromyography. This test involves the stimulation of one muscle fiber with that of another fiber innervated by the same motor neuron. Normally the time interval between the firing of the two fibers is somewhat variable, an effect called jitter. Defective neuromuscular transmission results in increased jitter or actual failure of transmission.² Positive results have been obtained in 75% of patients in remission, 88% with ocular myasthenia alone and 95–100% with generalized symptoms.¹

Tests that measure ACh receptor antibody are available and may be used as part of a standard workup for myasthenia gravis. The diagnostic yield depends on the anatomical location and severity of the disease. Positive results have been seen in 25% of patients in remission, 50% with ocular symptoms, 80 to 100% with generalized symptoms and 90% with chronic and severe disease.¹

Treatment

Myasthenia gravis has a wide clinical spectrum from very mild intermittent ocular disease to life-threatening respiratory failure due to respiratory muscle weakness. Some patients with very mild disease may not require treatment.

If medical treatment is warranted, the first line of therapy is usually an anticholinesterase agent. The drug most commonly used is pyridostigmine (Mestinon), which is titrated against symptom improvement and side effects (primarily diarrhea and abdominal cramping). This drug tends to be most effective in generalized myasthenia gravis. In ocular myasthenia ptosis may improve, but diplopia is generally more resistant.³

Corticosteroids (commonly prednisone) constitute another approach to medical management. Institution of high-dose therapy may lead to a severe exacerbation of symptoms, so these drugs are frequently started at low daily doses and slowly increased until symptoms are improved. Ideally,

“Myasthenia gravis should be considered when evaluating patients with weakness.”

the patient is then stabilized on every-other-day dosing. Improvement is achieved in 70 to 100% of patients.¹ Steroids are often used in association with thymectomy. Other immunosuppressive therapy has included such drugs as azathioprine, cyclosporin and more recently cyclosporin A.

Thymectomy is clearly a successful therapy in many patients, but the indications are somewhat controversial. Most authorities recommend thymectomy if thymoma is found, and many recommend thymectomy for any patient with myasthenia gravis between the ages of 14 and 50. Sustained improvement has been seen in 50 to 85% of patients so treated, and 20 to 36% have achieved remission.¹ The role of thymectomy in the elderly is discussed below.

Plasmapheresis has been used successfully for short-term treatment of exacerbations.

Special Considerations in the Elderly

A recent review of the epidemiology of myasthenia gravis reported information from two studies in Norway and New York showing a peak incidence in females in younger age groups (20–39), while the peak in males occurred in the 60–69-year-old group. While all studies reviewed show a greater overall incidence of myasthenia gravis in females than males, males exceeded females in the 60–69-year-old group.⁴

Older patients, particularly older men, tend to have more severe progressive disease and fewer spontaneous remissions.⁵ However, weakness in younger women with the disease tends to be more generalized, while that in older men more often is confined to the ocular, pharyngeal and respiratory muscles.⁶

Diagnostic testing does not differ between older and younger patients. Extra caution should be applied, however, to the edrophonium (Tensilon) test, since there is an increased incidence of cardiac disease in this age group and testing may result in sinus bradycardia, A-V block and, rarely, cardiac arrest.⁷

The use of anticholinesterase drugs may present

special problems in the elderly. These drugs are contraindicated in mechanical obstruction of the urinary tract, which is a consideration in elderly men with prostatic hypertrophy. Hypotensive episodes have also been reported with these drugs. Adverse cardiovascular events may occur in up to 1% of patients given anticholinesterase drugs, so particular care should be exercised in the elderly and especially those patients with pre-existing conduction defects.⁸

Corticosteroid therapy may be problematic because many of the common diseases in the elderly, such as diabetes mellitus and osteoporosis, are adversely affected by these drugs. Other common conditions, including hypertension and congestive heart failure, may be aggravated by the mineralocorticoid activity of the corticosteroids. Finally, reactivation tuberculosis is of particular concern during long-term corticosteroid administration in the elderly.

The role of thymectomy in the elderly patient remains controversial. It is well established that thymectomy is indicated for patients of any age in the presence of thymoma, which occurs in 10% of patients, predominantly older males.⁶ Many older patients have an atrophic thymus gland, but may also improve with thymectomy. One recent review and small clinical series has recommended thymectomy for all elderly patients with myasthenia gravis.⁹ Another recent review and clinical series recommends thymectomy for those patients with generalized incapacitating myasthenia gravis, but only after consideration of the patient's overall status and the risks of surgery versus drug therapy.¹⁰ Most would recommend thymectomy for those patients with radiologic evidence of resectable thymoma.

Comment

Weakness is a common complaint in general medical practice, particularly in the older patient. Myasthenia gravis, a diagnosable and treatable disorder, should be considered when evaluating patients with weakness.

REFERENCES

1. Ravits J. Myasthenia gravis: A well-understood neuromuscular disorder. *Postgrad Med* 1988;83:219-23.
2. Seybold ME. Myasthenia gravis: A clinical and basic science review. *JAMA* 1983;250:2516-21.
3. Penn AS, Rowland LP. Neuromuscular junction: Myasthenia gravis. In: Rowland LP, ed., *Merritt's Textbook of Neurology* (Philadelphia: Lea and Febiger, 1984), 561-67.
4. Cohen MS. Epidemiology of myasthenia gravis. *Monogr Allergy* 1987;21:246-51.
5. Grob D. Disorders of the neuromuscular junction:

Myasthenia gravis. In: Reichel W, ed., *Clinical Aspects of Aging* (Baltimore: Williams and Wilkins, 1989), 304-5.

6. Adams RD, Victor M. Myasthenia gravis and episodic forms of weakness. In: *Principles of Neurology* (New York: McGraw-Hill, 1989), 1150-59.

7. Engel AG. Myasthenia gravis and other disorders of neuromuscular transmission. In: *Harrison's Principles of Internal Medicine* (New York: McGraw-Hill, 1987), 2079-81.

8. Arsura EL, Brunner NG, Namba T, Grob D. Adverse cardiovascular effects of anticholinesterase medications. *Am J Med Sci* 1987;293:189-223.

9. Yasumasa M, Nakahara N, Yoshitaka F, et al. Myasthenia gravis in elderly patients. *Ann Thorac Surg* 1985;39:433-36.

10. Evoli A, Tonali P, Scoppetta C, Pasquale D. Myasthenia gravis in the elderly: Report of 37 cases. *J Amer Geriatr Soc* 1983;31:352-55.

Kansas Teachers Cited for Excellence in the Classroom

Four Kansas teachers of mathematics and science have been honored by the American Medical Association and the Kansas Medical Society, because they have exhibited creativity and leadership in their field, and their students have been motivated to do well in competition.

Mathematics teachers Cheryl K. White, Potwin Elementary School, Topeka; and Glennis Zimmerman, Wellington Middle School, Wellington, were presented plaques and cash awards by Roger D. Warren, M.D., Hanover, at the biennial meeting of the Kansas Association of Teachers of Mathematics on March 30, in Manhattan.

Science teachers Donna Erpelding, Marlatt Elementary School, Manhattan; and Carol Williamson, Frontier Elementary School, Olathe, received plaques and cash awards from Dr. Warren at the annual meeting of the Kansas Association of Teachers of Science on April 28, at Rock Springs Ranch, near Junction City.

The Kansas Medical Society is one of five state medical societies invited by the American Medical Association to develop and implement a model program for the recognition of science teachers at the elementary level. This initiative stems from concern over the decline of interest and ability of young people in this discipline, and its effect on the applicant pool for health and related professions. One way suggested to correct the problem is to reward educators who sustain and direct the interest of their students. The AMA and KMS hope that the establishment and implementation of an awards program can help improve attitudes and aptitudes in science and mathematics among both educators and students.

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Nitroglycerine Tolerance

DONALD L. VINE, M.D.,* *Wichita*

If constant exposure to nitroglycerine leads to attenuation of the vascular effects and to the development of tolerance, the clinician needs to know how long a single dose lasts and the duration of the nitrate-free interval needed to restore nitrate responsiveness.

Duration of Action

Zimrin and coworkers¹ infused nitroglycerine at rates of 20 to 120 $\mu\text{g}/\text{min}$ for 24 hours in 10 patients with chronic stable angina. The mean blood levels achieved (5.5–7.5 ng/ml) were two to three times those achieved with sublingual administration and 50 times the levels obtained with 5 mg patches. Bicycle stress tests were performed at baseline, 1, 4, 8, 12 and 24 hours. At 25 hours sublingual nitroglycerine was given and bicycle testing was repeated. An identical regimen was performed during placebo infusion.

Significant differences were found in exercise duration following treatment with nitroglycerine at 1, 4 and 8 hours after onset of infusion, but not at 24 hours (Figure 1). In addition, the responsiveness to sublingual nitroglycerine, as measured by time to onset of angina, was abolished following 24 hours of intravenous administration.

These observations are supported by the meta-analysis of randomized transdermal nitroglycerine trials reported by Colditz et al.² There was a statistically significant improvement in exercise tolerance for trials performing exercise tests at 3 to 4 hours following patch administration, but not for trials evaluating exercise after 24 hours.

Hemodynamic effects of nitroglycerine may last longer than the antianginal effects, but attenuation of lowered right atrial, pulmonary artery and capillary wedge pressures also begins within 24 hours among patients with congestive heart failure.³

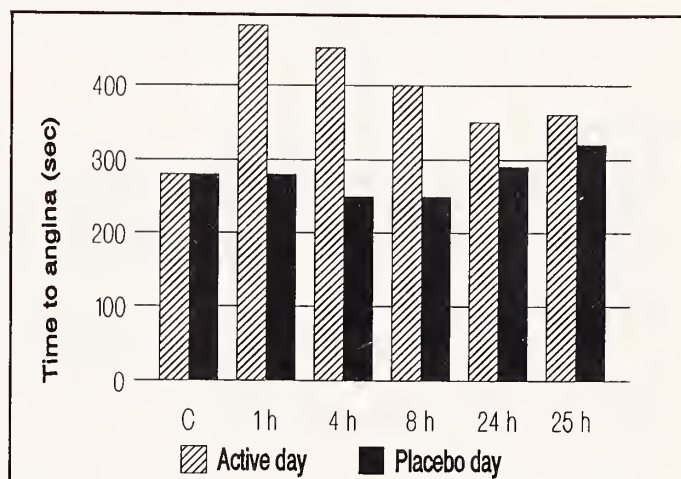


Figure 1. Duration of action of high-dose intravenous nitroglycerine compared to placebo. Adapted from Zimrin, 1988.

Dosing Schedules

Parker and associates⁴ assigned 10 patients to a randomized series of isosorbide dinitrate dosage schedules of 30 mg twice, three and four times daily for periods of one week. Treadmill exercise to angina was performed at baseline and at one, three and five hours after the final dose. A sustained beneficial effect was observed for twice and three times daily dosage schedules, but not for patients receiving four doses (Figure 2).

When long-acting isosorbide dinitrate is used,

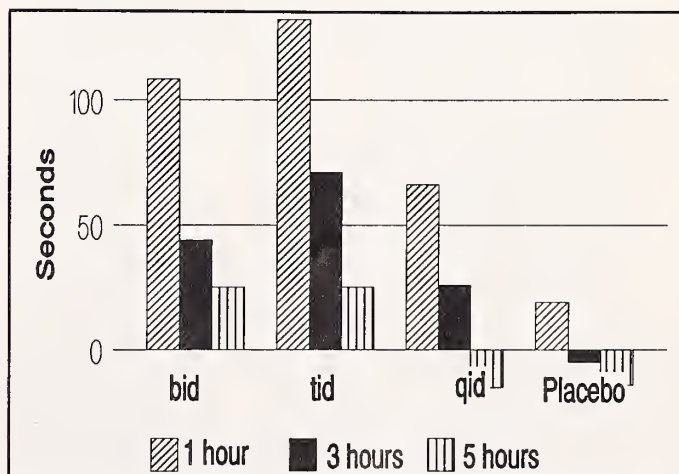


Figure 2. Exercise time following three dosage schedules of isosorbide or placebo. The four-times-daily schedule is no different from placebo. Adapted from Parker, 1987.

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an asymmetric dosage schedule is best. Silber et al. found exercise-associated improvement in left ventricular ejection fraction to persist after two weeks of 80 mg of isosorbide dinitrate given at 8 a.m. and 2 p.m., but not when given at 8 a.m. and 8 p.m.

The nitrate-free interval required for continued responsiveness to the antianginal effects of transdermal nitroglycerine patches has been shown to vary from 8 to 12 hours.^{5, 6}

Comments

When nitroglycerine is given continuously, attenuation develops to the hemodynamic and antianginal effects in patients with angina or congestive failure. While there is wide variation in individual patient susceptibility to the development of tolerance, as little as 24 hours of continuous administration can lead to marked reduction or elimination of nitroglycerine effectiveness.

If intravenous nitroglycerine is used for the treatment of unstable angina, the therapeutic strategy should probably include the addition of a second antianginal agent and plans for transition to intermittent therapy by 18 to 24 hours.

REFERENCES

1. Zimrin et al. Antianginal effects of intravenous nitroglycerin over 24 hours. *Circulation* 1988;77:1376-84.
2. Colditz et al. Randomized clinical trials of transdermal nitroglycerin systems for the treatment of angina: A meta-analysis. *Am Heart J* 1988;116:174-80.
3. Roth A, et al. Early tolerance to hemodynamic effects of high dose transdermal nitroglycerine in responders with severe chronic heart failure. *J Am Coll Cardiol* 1987;9:858-64.
4. Parker JO, et al. Effect of intervals between doses on the development of tolerance to isosorbide dinitrate. *N Engl J Med* 1987;316:1440-44.
5. Luke R, Sharpe N, Coxon R. Transdermal nitroglycerin in angina pectoris: Efficacy of intermittent application. *J Am Coll Cardiol* 1987;10:642-46.
6. DeMots H, Glasser SP. Intermittent transdermal nitroglycerin therapy in the treatment of chronic stable angina. *J Am Coll Cardiol* 1989;13:786-95.

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Warnings: **Angioedema:** Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Patients with heart failure given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy. (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in patients with heart failure), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, Drug Interactions and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: **General:** **Impaired Renal Function:** As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (>5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See Drug Interactions.)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness, especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyl-dopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors. A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Pregnancy—Category C: There was no teratogenicity or fetotoxicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters.

There are no adequate and well-controlled studies of enalapril in pregnant women. However, data are available that show enalapril crosses the human placenta. Because the risk of fetal toxicity with the use of ACE inhibitors has not

been clearly defined, VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Postmarketing experience with all ACE inhibitors thus far suggests the following with regard to pregnancy outcome. Inadvertent exposure limited to the first trimester of pregnancy has not been reported to affect fetal outcome adversely. Fetal exposure during the second and third trimesters of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported, presumably representing decreased renal function in the fetus. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors, but it is not clear whether they are related to ACE inhibition, maternal hypertension, or the underlying prematurity.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of ¹⁴C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

HYPERTENSION: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

HEART FAILURE: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Cardiac arrest; myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, Hypotension); pulmonary embolism and infarction; pulmonary edema; rhythm disturbances; atrial fibrillation; palpitation.

Digestive: Ileus, pancreatitis, hepatitis (hepatocellular or cholestatic jaundice), melena, anorexia, dyspepsia, constipation, glossitis, stomatitis, dry mouth.

Musculoskeletal: Muscle cramps.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION).

Respiratory: Bronchospasm, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection.

Skin: Exfoliative dermatitis, toxic epidermal necrolysis, Stevens-Johnson syndrome, herpes zoster, erythema multiforme, urticaria, pruritus, alopecia, flushing, hyperhidrosis.

Special Senses: Blurred vision, taste alteration, anosmia, tinnitus, conjunctivitis, dry eyes, tearing.

A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgias/arthritis, myalgias, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitivity, rash, and other dermatologic manifestations.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g% and 1.0 vol%, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown): In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported. A few cases of hemolysis have been reported in patients with G6PD deficiency.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: **Hypertension:** In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance > 30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤ 30 mL/min (serum creatinine ≥ 3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, Pharmacodynamics and Clinical Effects.) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Patients with Heart Failure and Renal Impairment or Hyponatremia: In patients with heart failure who have hyponatremia (serum sodium < 130 mEq/L) or with serum creatinine > 1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, Heart Failure, WARNINGS, and PRECAUTIONS, Drug Interactions.) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

For more detailed information, consult your MSD Representative or see Prescribing Information, Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, PA 19386. JVS61R2(819)

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July 1990

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Oral Contraceptives and Cancer Risk
Removal of Cactus Spines



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KANSAS MEDICINE

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**ABOUT OUR LOGO**

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

Against a ribbon of prairie, a truck roars along making up time for the twists, turns and urban delays elsewhere. It makes the central point of Jim Hamil's rendition of a western Kansas plain. Shortly, that truck will pass other trucks carrying their cargoes in the other direction in that trucking checker game that spreads goods across the country and beyond. The harvest is past, and the plains are bare and typically flat. The fence posts recall the earlier contentions between the cattlemen and the farmers. Birds too small to be seen inhabit the fields, and we can imagine them sitting on the fence posts, since such touches are characteristic of Jim's work. The telephone wires speak of the role of communication — by person, by horse, by stage, then railroad and telegraph and now the instant forms of transmission that complicate our lives today.

But the scene is dominated by the towering clouds, a common sight in summertime Kansas as they warn of storms in the making. The ubiquitous weatherpeople will report the possibility of such storms in terms of percentage possibility, which the natives will take with varying quantities of salt, since those most concerned will know better — well enough, at least, for their own purposes. This certainty was not present in the earliest arrivals, however, and they devoted no small amount of attention to observing and recording their experiences with the elements in the "new" land.

Physicians in particular gave special attention to the climate in order to determine weather's effects on health and disease in the new land to the point of having a Committee on Climatology to report at the annual meetings of the Kansas Medical Society. These reports of temperatures, wind characteristics and rainfall were held up against their experiences with disease in search of some dependable relationship. Whether it speaks to the weather as such or the health of the populace, Tiffin Sinks of Leavenworth was prompted to conclude in his report in 1872 that "the climate of Kansas would, we think, be very appropriately termed a bracing one, and without exaggeration, a very healthy one for this latitude."

Travel and Tourism Division, please copy.

Medical Society

We are indebted to a colleague, Morton R. Creditor of the KUMC-Kansas City, for a reorientation of sorts. In a recent communication to the *New England Journal of Medicine*, Dr. Creditor reports his fascination with the proliferation of "how-to" courses offered by our community hospitals. These seminars, conferences and continuing programs purport to assist individuals in coping with various problems of life — essentially those areas of experience presumed, in an earlier, less enlightened time, to be the individual's independent (if often inadequate) responsibility to meet. In the discussion, he refers to what he calls the "medicalization of society."



At times, we have referred to the "secularization of medicine" (though whether it was original we do not recall, since benign plagiarism is the meat and potatoes of writers), and we realized that the progressive intrusion of socioeconomic matters into the medical life had reached the point that medical subjects, functions and personnel have become virtually absorbed into the social scenario. In a few decades, medicine has moved from a professionally prescribed and relatively independent discipline to an essential tool of social communication demanding nationwide attention on a daily, even hourly, basis.

This gives us the opportunity to draw attention to one form of the process that has interested us over the years: the transformation of the health (or disease, if you will) organizations from their humble beginnings of local, strongly personal efforts into the broad, professionalized businesses of today. A prototype of sorts was the Red Cross — noble in purpose but, since its service is most visible in times of war or natural disaster when the public is under particular stress, often the focus of public criticism.

There may have been earlier efforts related to disease, but our first recollection of disease-oriented effort was the Tuberculosis Association, probably because of their inspired plan of using the Christmas seal approach, assuring broad attention (and giving small fry something they could stick on anything that would hold still).

The real boost to health organizations, however, came when Franklin D. Roosevelt promoted the National Foundation for Infantile Paralysis with his charisma and the dramatically successful March of Dimes. Since that time, there has scarcely been a disease that has not produced its support organization, local in origin, perhaps, but coalescing into a national effort. In the process, the function changed from the personally involved effort of someone in the neighborhood to intermittent annual ceremonies in which civic leaders led community-wide drives with emphasis on the business and commercial organizations. In the process, it added to our folklore the phrase "I gave at the office."

But now the effort is moving from the intense, periodic, sometimes emotional process of volunteerism to the economically oriented, professionally supervised and, above all, continuing effort to contend for the affections and funds of the public. The monthly computerized bill has all but replaced the neighborhood drive, bearing no relation to whether or when donors have contributed their mites. The system is, dollar for dollar, more efficient — and good business.

But these efforts have been only a pale announcement of the role business would play in the practice of medicine — and the part medicine would play in the conduct of business. Today, no medical office can be without one or more individuals assigned exclusively to the business of the office — and no business can function without attention to the medical status of its employees: work environment, health insurance, sick leave and so on. The public receives its daily dose of medicine not only in features in the print media but also from the network's personal medical authority on the 6:00 news. To the chagrin of the medical community, business factors have inextricably invaded its practices, but no less have medical activities become part of the daily social fare with their impact on business. Increasingly, medical students are being exposed to business principles and methods. We presume a degree of equilibrium will be reached when business schools begin to offer courses in medical subjects. Perhaps they can get pointers from the trial lawyers, who are already well versed in such matters. **D.E.G.**

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References

1. *USP DI Update*, September/October 1988, p 120.
2. *Br J Clin Pharmacol* 1985;20:710-713.
3. Data on file, Lilly Research Laboratories.
4. *Scand J Gastroenterol* 1987;22(suppl 136):61-70.
5. *Am J Gastroenterol* 1989;84:769-774.



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Brief Summary. Consult the package literature for complete information.

Indications and Usage: 1. *Active duodenal ulcer*—for up to eight weeks of treatment. Most patients heal within four weeks.

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Contraindication: Known hypersensitivity to the drug. Use with caution in patients with hypersensitivity to other H₂-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix[®] may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chloridiazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given

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an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events was due to the drug.

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Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to three times the upper limit of normal, however, did not significantly differ from that in placebo patients. Hepatitis and jaundice have been reported. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Because cross-sensitivity among this class has been observed, H₂-receptor antagonists should not be administered to those with a history of hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

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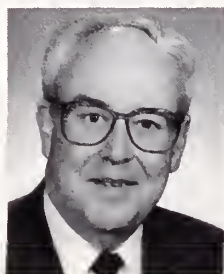
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Light at the End of the Tunnel

Could it be that for the first time in years, the atmosphere of medical practice in the State of Kansas is improving? Certainly, we can appreciate the reduction in premium costs for medical malpractice insurance. This has largely come about through the efforts of our Kansas Medical Society staff and our legislative committee in actively pursuing our cause with the Kansas State Legislature. In addition, a most significant development has been the formation of our physician-owned, not-for-profit medical liability insurance company. The acceptance of KaMMCO by the Kansas physicians has exceeded our most optimistic projections. As KaMMCO has become a dominant force among medical malpractice insurance carriers, premiums have taken a significant and impressive reduction in cost to the health care provider. We hope that, as tort reform continues to be upheld by our legislative and judicial bodies in Kansas, there will be further improvements in the medical liability field.



Further problems await resolution, however, before we can clearly see a more positive attraction for medical practice in Kansas. One of the biggest issues that remain is to make primary care an attractive specialty in our non-metropolitan regions. One of the major impediments is the lack of adequate reimbursement for services provided by primary care physicians. Recent federal attempts to develop a more equitable reimbursement system based on the relative value of cognitive services will help, but in a far-too-distant future, and to an extent that remains to be determined. A pressing issue that is surfacing with some rapidity, and which is receiving a great deal of attention in the political arena, is the subject of access to health care. What this really translates into is the sobering fact that over 30 million Americans do not have the means to pay for the most basic elements of medical care. Previously I have urged that Kansas physicians become engaged in discussions on how this inequity can be corrected. There is one caveat that I wish to make at this point: Let us not dwell upon the moral

issues involved in indigent patient care. I recently read a refreshingly straightforward account of a commencement address delivered by Francis T. (Fay) Vincent, Jr., the new commissioner of major league baseball. Mr. Vincent's basic message was a plea to keep moralisms out of economic problems. He pointed out that, during the recent baseball strike, there was a tendency in our society to translate economic issues and conflicts into moral ones. The simple fact regarding access to health care is that someone has to pay the bill. Physicians must be very direct and explicit in stating that the dilemma of universal health care is an economic one and is not an issue in the ethical relationship of the physician and the patient.

And so it does seem that the good news in recent months regarding medical practice in Kansas affords us the optimistic view that there is a light at the end of the tunnel. We must make certain that it is not the headlight of an economic juggernaut heading towards medicine in the form of a national plan to force physicians to absorb further the cost of indigent care.

Joseph E. Truck, M.D.

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WAYNE T. STRATTON, J.D.,* *Topeka*

Even with today's ever-increasing legislative intrusion into the field of medicine, to date there are no regulatory provisions defining the responsibilities of physicians in regard to prescription renewal. The cost, time conveniences and advantages of renewing prescriptions without first re-examining the patient are numerous. Many times the patient's condition is unchanged, and the nature of the condition is such that it is unnecessary to examine the patient each time a renewal is needed. However, while the process of renewing prescriptions is left to the discretion of the physician, there are also inherent dangers involved if the physician chooses not to re-examine the patient.



One of the most obvious dangers is when the patient becomes addicted as a result of a physician continually renewing a prescription narcotic. A significant number of actions have been brought against physicians claiming the physicians are liable for causing the addiction. As a result, the courts have held that physicians have a duty to monitor a patient's dependence on the drug prescribed. In addition, the physician has a duty to know the characteristics of the drug and the dosage appropriate for the patient. Physicians have also been charged with the responsibility of determining what other drugs the patient is taking and properly prescribing combinations. The courts have also found physicians have a duty to warn patients of the dangers associated with different drugs.

If the patient develops an addiction to the prescribed medicine that is not necessary for treat-

Doctor, would you renew my prescription?

ment, and the treatment is found to be below the accepted standard of medical care, then the physician can be held liable for malpractice. The fact that the patient becomes addicted, continues in the physician's care and knowingly continues his addiction does not automatically make the patient negligent. The patient only bears part of the responsibility when doing something wrong, or unless he or she is aware that the physician is negligent.

However, when the patient uses subterfuge to obtain narcotics for a preexisting addiction when there is no medical reason, the physician is no longer liable if he/she prescribed the medicine with a good-faith belief that a medical need existed.

Similar problems arise in situations in which the patient does not become addicted to the drug, but because of the change in the patient's condition the original prescription is no longer appropriate. Each time a call is received, the burden is placed upon the physician to determine the appropriateness of the drug. Blanket renewals without inquiry or periodic physical examinations can lead to liability if an injury results. Probably in no other aspect of the practice of medicine is there such a recurring demand upon the physician to constantly exercise good judgment in weighing the needs of the patient versus the cost and the necessity of further medical evaluation.

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

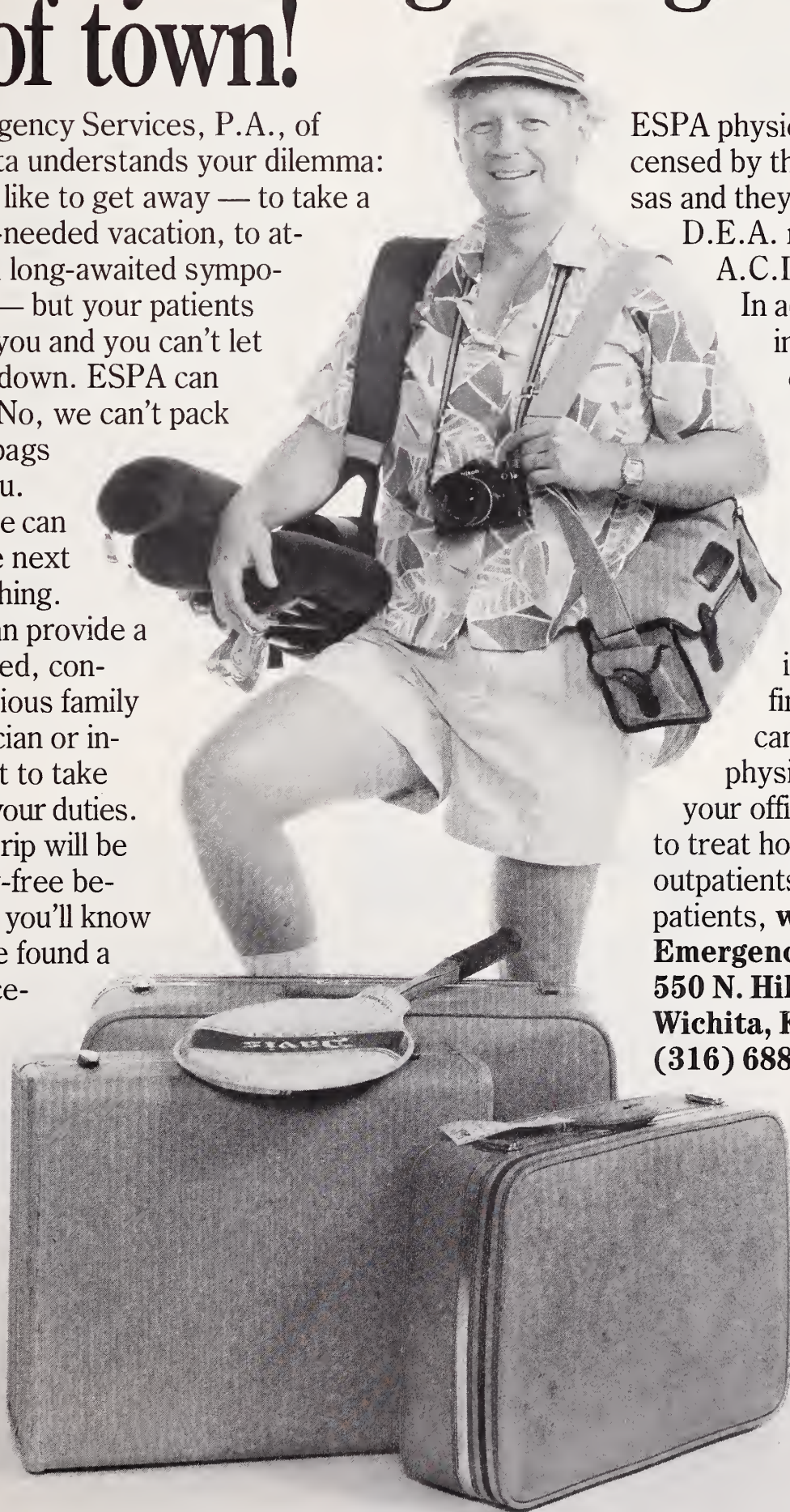
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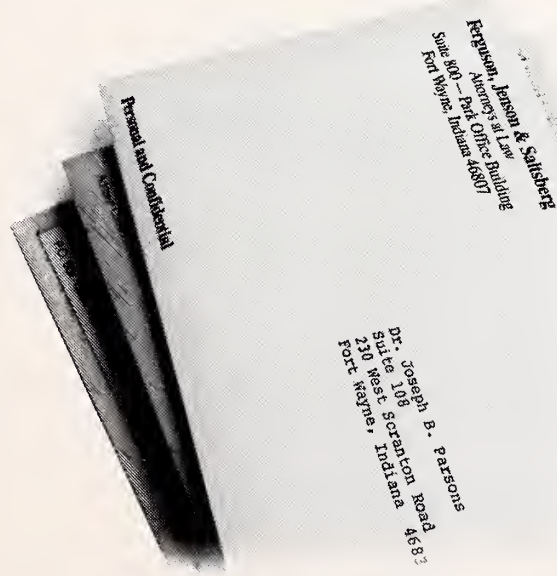


Medical Care for Needy Kansans



Alex Scott, M.D., Junction City (second from right), KMS Executive Director Jerry Slaughter (right) and two officials from the Division of Health look on as Governor Mike Hayden signs Senate Bill 736, which promotes more charity health care for needy Kansans.

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A Pointed Problem

JOSEPH M. SACK, M.D.,* *Wichita*

A 7-year-old black male was brought to the emergency room late one evening. The mother reported a neighbor child had pushed the patient into a patch of prickly pear cactus approximately 30 minutes earlier. The child was clothed only in a pair of cotton shorts. Other past medical history was noncontributory.

Physical examination revealed a whimpering, fidgeting child with a multitude of cactus spines covering the base of the neck, entire back, abdomen, and more than half of each extremity. The cactus spines were approximately 3 to 5mm long and were grouped in a clumped distribution that was consistent with the mother's description of a fall into prickly pear cactus.

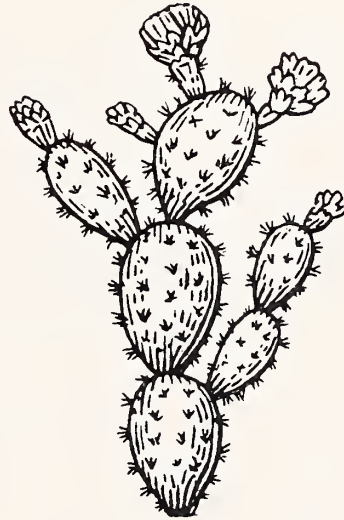
It was readily apparent that removal of individual spines with forceps would be exhausting for both patient and staff. Removal with several types of dressing tapes was tried without success. Melted wax was obtained from the physical therapy department for an attempt at peeling off the spines. This also was unsuccessful.

After surveying the available resources, a strip of plaster casting material was moistened and applied to a small area of spines. After the plaster strip dried it was pulled from the skin, along with nearly all of the cactus spines. The patient tolerated the trial procedure well. Plaster strips were then applied to the remaining affected skin, with hair dryers used to speed the drying process. After the dried plaster was removed, examination of the skin revealed only a few retained spines, which were removed with forceps. The plaster dust was washed off, and the child was released. Follow-up with the mother indicated that the child had no further problems with pain, itch or subsequent skin problems.

Discussion

Medical treatment of cactus spine injuries is without a uniformly accepted modality. Traditional treatment is tedious removal with forceps. A

Medline search of the literature disclosed a handful of innovative techniques described in letters and reports. These include: Avon's Aloe Smooth Peel-off Facial Mask,¹ adhesive or cellophane tape,² Hair-Off hair removal wax,³ No-Tweeze depilatory wax⁴ and water-soluble woodworking glue used with a piece of linen.⁵



Though removal of superficial foreign bodies is a skill mastered early in medical training, in this case, the task was multiplied a thousandfold. The technique employed on the patient, though novel, proved quite satisfactory, and unlike some of the materials listed above, plaster casting is a common product in most medical offices and emergency rooms.

The plaster technique has since been employed with equal effectiveness on other patients.

REFERENCES

1. Putnam M. Simple cactus spine removal. *J Pediatr* 1981;98:333.
2. Cooper L. Removing cactus spines. *AJDC* 1988;142:1140.
3. Hennes H. Removal of cactus spines from the skin. *AJDC* 1988;142:587.
4. Schunk J. Cactus spine removal. *J Pediatr* 1987;110:667.
5. Gelbard MK. Removal of small cactus spines from the skin. *JAMA* 1984;252:3368.

*Department of Family and Community Medicine, UKSM-Wichita.

Address correspondence and reprint requests to Dr. Sack at UKSM-Wichita, 1010 N. Kansas, Wichita, Kansas 67214.

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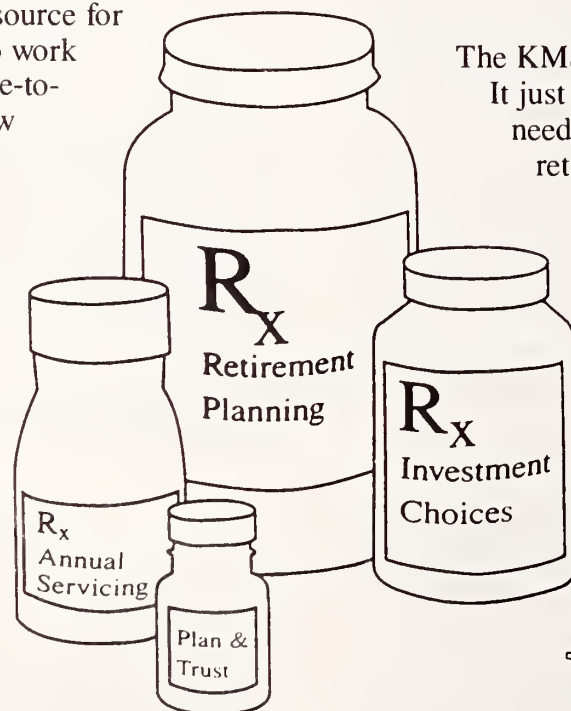
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Combination Oral Contraceptives and Cancer Risk

KRIS GAST, M.D., AND THOMAS SNYDER, M.D.,* *Kansas City*

Fifty million women in the United States and 150 million worldwide have used oral contraceptives at some time in their lives.¹ The popularity of these drugs stems from their convenience and effectiveness. However, one of the main concerns for women who consider using oral contraceptives is how these hormones affect their risk of cancer. It has been known for some time that steroid hormones play a role in the development of cancer (i.e., menarche and pregnancy have been associated with risk of developing cancer). Exogenous steroid hormones can also increase cancer risk. Diethylstilbestrol (DES) use has been linked to the development of vaginal cancer, and conjugated estrogens used after menopause increase the risk of endometrial cancer.²

The purpose of this paper is to provide a succinct review of the current literature on the risk of cancer associated with oral contraceptive use. Endometrial, ovarian, cervical, breast and liver cancer will be reviewed.

Mechanism of Action

Three types of oral contraceptives are marketed today: combination stable dose, phasic and daily progestin. The combination oral contraceptive, the most widely used, will be examined in this paper. Combination oral contraceptives are tablets, containing an estrogen (either ethinyl estradiol or mestranol) and one of a variety of progestins, which are taken continuously for 21 days and discontinued for a week. Suppression of ovulation is the primary mechanism of action. The estrogen or the progestin is capable of suppressing the midcycle gonadotropin surge, thereby inhibiting ovulation. Oral contraceptives act on other aspects of the reproductive process as well. Cervical mucus thickens and becomes hostile to sperm migration. The endometrium, under the influence of the progestins, becomes markedly thin, inactive, and unprepared for implantation

of the embryo. The motility of the uterus and oviduct is altered, affecting the transportation of both sperm and ova. Ovarian responsiveness to gonadotropin stimulation may also be altered. Neither gonadotropin production nor ovarian steroidogenesis is completely abolished, and blood levels of endogenous hormones during ingestion of oral contraceptives are similar to the levels during the early follicular phase of the normal cycle.²

Endometrial Cancer

Epidemiology and Etiology. In the United States, endometrial cancer is the most common female genital malignancy and the third most common cancer overall in women, exceeded only by breast and lung cancer, with 34,000 new cases expected in 1989.³ Although it may appear at any time during the reproductive and menopausal years, it is found mainly in women who have experienced menopause. The age range at time of diagnosis ranges from the 20s to the 90s, with an average age of 61 years. Only 5% of patients are under 40, and fewer than 25% are diagnosed before menopause.² The classical risk factors associated with endometrial cancer are obesity, nulliparity, and late menopause. Women who are 21 to 50 pounds overweight have a frequency for developing endometrial cancer three times that of normal-weight females. Women who are more than 50 pounds overweight have a frequency of ten times that of normal. One-quarter of these patients are nulliparous; the risk of endometrial cancer for the nulliparous women is two times greater than that of females who have had one child and three times that of females who have had five children. Women who reach menopause after age 52 have a risk 2.4 times greater than females who reach menopause before age 49.¹ The increased risk in nulliparous women and women who experience a late menopause has been attributed to a prolonged and uninterrupted estrogen exposure. Endometrial cancer is also associated with use of exogenous estrogens, history of hypertension, diabetes mellitus and Stein-Leventhal syndrome.⁷

*Department of Gynecology and Obstetrics, KUMC-KC.
Address correspondence and reprint requests to Dr. Gast at St. Luke's Hospital of Kansas City, Medical Education Office, 4400 Wornall Road, Kansas City, MO 64111.

Literature Review. The Cancer and Steroid Hormone (CASH) study³ of the Centers for Disease Control, referenced herein as CASH³, found women who had used exclusively combination oral contraceptives had an age-adjusted risk of 0.5 for developing endometrial cancer, compared to women who had never used any type of oral contraceptive. The majority of the women in the study had used oral contraceptives with greater than 50µg of estrogen. Women using lower-dose oral contraceptives may experience a different protective effect. A time-response effect was found, with no significant decrease in risk for females using oral contraceptives less than twelve months. However, from 12 to 23 months a significant decrease in risk for users, compared with non-users, was demonstrated. The protective effect was even present in women who had first used oral contraceptives 20 years or more prior to the study. Age at first use did not affect the association between oral contraceptive use and decreased risk of endometrial cancer. Oral contraceptive use for a year or more among women with parity of less than five was associated with a decreased risk, with the greatest protection being afforded to the nulliparous woman. Women who had parity of five or greater had a risk of 0.8, compared to non-users. The CASH³ study found no differences in the categories of age, obesity, smoking, alcohol consumption, use of exogenous estrogens or menopausal state. Results were similar among women with adenocarcinoma, adenoacanthoma and adenosquamous carcinoma. No difference was found in the effect of oral contraceptives among women of differing fertility. The CASH³ study concluded that oral contraceptive use protects against the development of endometrial cancer, and that this protection persists for fifteen years after discontinuation. No statistical difference in the protective effect was found in the different categories of age, adiposity, smoking, alcohol consumption, use of exogenous estrogens or menopausal status. Women with a parity of greater than five were not afforded protection beyond that already provided by their parity. The study was limited to women between the ages of 20 and 54, so the association between endometrial cancer and oral contraceptives should be studied in women over age 55, since 75% of endometrial cancer cases are diagnosed after the age of 55. Women using lower-dose pills may experience a different protective effect than women in the CASH³ study.

The WHO Collaborative Study of Neoplasia

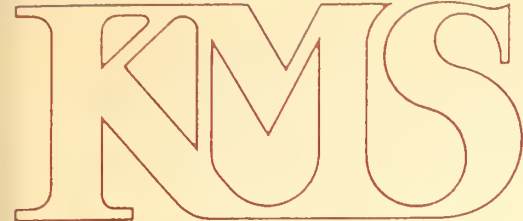
and Steroid Contraceptives⁸ found a 50% lower incidence of endometrial cancer in those women who had used oral contraceptives, as compared with those who had never used oral contraceptives. The decreased risk was seen with adenocarcinomas and adenosquamous carcinomas. The protective effect appeared to be independent of the absolute incidence of the disease.

Derman, in the paper entitled *Oral Contraceptives, Assessment of Benefits*,¹ concluded that the use of oral contraceptives for more than one year reduced the risk of endometrial cancer by at least 50%, the reduction was greatest in nulliparous women, and the protective effects lasted at least 10 years after discontinuation.

Conclusion. The use of oral contraceptives for a period of one year or more reduces the risk of endometrial cancer by as much as 50%, this effect being most evident in nulliparous women. The protective effect lasts at least as long as 10 years and possibly as long as 15 years after discontinuation. Decreased risk beyond that provided by parity alone is not afforded women with parity greater than five. The association between the lower-dose oral contraceptives and endometrial cancer in women over 55 should be further assessed.

Ovarian Cancer

Epidemiology and Etiology. Ovarian cancer is the leading cause of death from gynecologic malignancy in the United States, with an overall five-year survival rate of only 30%. Each year 18,500 new cases are detected, and more than 11,000 women die.⁴ Cancer of the ovary ranks as the fifth most frequent type of cancer in women and is the fourth leading cause of cancer deaths. One-third of the cases will occur in women between the ages of 20 and 54, with an average age of 55. Epithelial neoplasms are the most frequent type of ovarian cancer, accounting for over 90% of cases.² Little is known about the cause of ovarian cancer. Worldwide variation in incidence is seen, with ovarian cancer most frequently observed in industrialized nations.¹ The higher incidence found in industrialized nations suggests an environmental or dietary factor may be involved. Genetic factors have been implicated in some ovarian neoplasms, as women with a strong family history of ovarian cancer may show up to a 50% risk of developing the disease. Hormones may also play a role in the etiology, as the incidence is higher in women who are nulliparous and in women who have their first pregnancy at



JULY 1990

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MEDICARE TO PAY FASTER--FOR A WHILE

The 14-day delay in payment by Medicare carriers will be lifted from July 1 through September 30 for physicians and hospitals. This appears to be a Gramm-Rudman-Hollings accounting ploy to shift end-of-the-year fiscal spending onto this year's ledger, thus artificially reducing next year's spending. In past years, the Department of Defense has also utilized this practice.

Normally, processing of "clean" claims takes six to eight days. Thus, the removal of the 14-day hold period should speed up the claims payment process by six days. The 14-day hold period is expected to be reinstated on October 1, the beginning of the new fiscal year.

MEDICAID PROGRAM COST-CONTAINMENT ITEMS

As of July 1, some of the Medicaid program cost containment efforts included in HB 3088 had not been implemented. But officials at SRS have stated that the following items from HB 3088 have been implemented:

- * Selected co-payment increases,
- * Reimbursement only for specific drugs when the diagnosis meets established criteria,
- * Reduction of the Primary Care Network (PCN) case management fee by 33% (to \$2.00),
- * Consideration of psychotherapy as content of service of all hospitalizations,
- * Further tightening of criteria for medically necessary diagnostic and surgical procedures (pre-certified procedures).

The remaining cost-containment items listed in HB 3088 and printed in the June newsletter are pending and will be considered for implementation or replacement with other items, based on budget allocations versus expenditures during this fiscal year.

NATIONAL PRACTITIONER DATA BANK: ACTION NEEDED NOW!

The National Practitioner Data Bank (NPDB) is scheduled to open in September. There are four types of actions that must be reported to the data bank:

- * Medical malpractice payments of \$1.00 or more,
- * Licensure actions taken by boards,
- * Clinical privilege actions,
- * Society membership actions.

Physicians should review clinical privileges at all hospitals of past or present affiliation and ensure that privileges are reflective of current practice. If not, ensure that corrective action is completed before such changes become reportable in September.

Check with your malpractice insurance company and ensure that the company agrees to dispute aggressively all future claims filed against you, regardless of the amount.

Review hospital by-laws with the medical staff attorney to ensure adequate protection of confidentiality of queries and response data, voluntary surrender of privilege, and an internal hearing process prior to reporting adverse actions.

Check with your hospital chief-of-staff to be sure the query/reporting policies and procedures have been reviewed.

If you have any questions regarding these procedures, call Carolyn Counts, Director of Health Care Finance, at 800-332-0156, or 913-235-2383.

TESTS PERFORMED IN PHYSICIANS' OFFICES

As currently written, the Clinical Laboratory Improvement Amendments of 1988 (CLIA '88) apply to all laboratories, including those in physicians' offices. The proposed regulations present stringent personnel qualifications for offices where tests beyond "level I" will be performed.

The proposed regulations state that all labs (those that perform waived tests, level I tests and level II tests) must also apply for the following certificates every two years:

- * Labs that perform only tests on the waived list will have to apply for HHS certificates of waiver.
- * Labs that perform level I and level II tests will have to apply for certificates. Those labs that are currently regulated under Medicare/Medicaid and CLIA '67 programs and meet the requirements under those regulations will be issued HHS certificates. Those labs that have not been regulated previously or that have been accredited by a private accreditation program or state licensing system will be issued provisional certificates until HHS can inspect them, determine whether they comply with the regulations and issue certificates to them.
- * At a later date, certificates of accreditation may be issued to labs that perform level I and level II tests in lieu of HHS certificates, provided the labs meet the standards of an HHS-approved, private, non-profit accreditation or state licensure program. HHS is currently drafting another proposed rule for recognizing private and state accrediting bodies, but until that regulation is finalized, labs accredited by CAP or the New York State licensure system will have to comply with these federal standards by applying for certificates.

Labs that perform only tests listed on the following list under "certificate of waiver tests" must formally apply for these certificates of waiver every two years and must permit HHS to conduct random, unannounced inspections to determine that the lab is performing only those specified tests.

Certificate of waiver tests

A laboratory may qualify for a certificate of waiver if it restricts the tests that it performs to one or more of the following tests or exams and no others:

- * Dipstick or tablet reagent urinalysis for the following:
 - Bilirubin - Ketone - Urobilinogen - pH
 - Glucose - Leukocytes - Protein
 - Hemoglobin - Nitrite - Specific gravity

- * Fecal occult blood
- * Spun microhematocrit
- * Microscopic examination of the following:
 - Urine sediment
 - Vaginal wet mount preparation
 - Pinworm preparation
- * Ovulation tests--visual color tests for human luteinizing hormone
- * Whole blood clotting time
- * Urine pregnancy tests
- * Slide card agglutination tests to screen for the following:
 - Antistreptolysin O (ASO)
 - Rheumatoid factor
 - C reactive protein (CRP)
 - Infectious mononucleosis
- * Gram stain (on discharges, and exudates)
- * Potassium hydroxide (KOH) preparation on cutaneous scrapings
- * Erythrocyte sedimentation rate
- * Sick cell screening--methods other than electrophoresis
- * Glucose screen whole blood dipstick method--visual color comparison determination
- * Semen analysis.

Level I Tests

A laboratory may qualify for a certificate or provisional certificate to perform level I tests, provided that it only performs tests on the certificate of waiver list or one or more of the tests listed below:

- * Cholesterol screen--qualitative and semiquantitative determinations
- * Culture for colony counts for urinary tract infection--not to include identification and susceptibility
- * Hemoglobin--methods other than electrophoresis
- * White and red blood cell counts
- * Hematocrit
- * Urea nitrogen (BUN)
- * Creatinine
- * Uric acid
- * Glucose
- * Direct strep antigen test

Level II Tests

A laboratory must obtain a certificate for level II testing if it performs one or more tests not listed on either the certificate of waiver or level I test.

Comments on the proposed regulations are being accepted by HCFA until August 20, 1990, at the following address: Health Care Financing Administration, Department of Health and Human Services, Attention HSQ-176P, P.O. Box 26676, Baltimore, MD 21207.

REMINDER: REGISTER
(OR RE-REGISTER)
TO VOTE

If you have moved to another residence--even within the same town--since the last election, it is necessary to re-register in order to vote. The deadline for registration to vote in the primary election August 7 was July 22, but there is still time to register to vote in the November general election. The deadline for registration to vote in the general election is October 21.

In most counties there are official "outposts" in addition to the courthouse where you may register. For information about

registration, call your county election officer, who is usually the county clerk.

If you're interested in an incumbent's voting record on tort reform issues, or candidates supported by the Kansas Medical Political Action Committee, call Chip Wheelen, KMS Director of Public Affairs, at 800-332-0156 or 913-235-2383.

CONFERENCE ON WAYS TO IDENTIFY UNIDENTIFIED REMAINS

A video teleconference entitled Investigative Uses of State and National Computer Systems will take place on September 12 at 11:00 a.m. This conference will offer information useful in identifying unidentified remains, such as NCIC missing/ unidentified person files; packing the record: scars, marks, tattoos, dental information and premortem injuries; and computer cross-search.

There will be viewing sites in all parts of Kansas. To locate the one nearest you, call the FBI/Kansas City (MO) Police Training Coordinator at 816-221-6100. You must also contact the viewing site you plan to attend.

FUNDING FOR DIABETES RESEARCH

The Juvenile Diabetes Foundation is taking applications for three awards and fellowships to be granted for diabetes research, commencing in 1991. Deadlines for all three are October 1, 1990. Detailed information is available from Grant Administrator, Juvenile Diabetes Foundation International, 432 Park Avenue South, New York, NY 10016; phone: 212-889-7575.

HANSEN'S DISEASE PROGRAM

The Department of Health and Human Services has a program that assists both Hansen's disease patients and their physicians. The Regional Hansen's Disease Program provides care to 3,700 patients through a nationwide network of more than 900 physicians. But there are approximately 6,000 Hansen's disease patients living in the United States. The coordinator of the program requests that physicians who care for patients with Hansen's disease contact him. Those who do may utilize the program's resources, including medications, patient education materials, insensitive limb screening materials and clinical literature, and may be placed on the program's referral list if desired. Call Larry Pfeifer, Clinical Coordinator, at 800-642-2477.

COMING NEXT MONTH...

The 1990 edition of the KMS Membership Directory. Every member receives one copy at no charge. For additional copies (\$15 each plus tax), call Donna Decker at 800-332-0156.

YOU'RE GETTING OLD IF...

You're irritated by people who walk up the escalator while it's moving....It takes more than a year to wear out a pair of sneakers....You have a charge account at a home improvement center....You refuse to buy a car that doesn't have cruise control....You recently bought one of those little carts to roll out your trash cans....You can recommend a good periodontist....You don't see why manufacturers have to print their product instructions in such small type....Beatlemania doesn't seem that long ago.

a later age. Patients with breast cancer have a twofold increase in the risk of developing ovarian cancer as a separate primary. The ovary is a common site of metastases from a variety of other cancers, including carcinomas arising in other pelvic organs, breasts and the upper gastrointestinal tract. Controversial risk factors include excessive use of caffeine, increased contact with talc or asbestos, decreased vitamin A intake, increased animal fat in the diet, contracting rubella as a teenager and subclinical mumps infection.¹

Literature Review. The Centers for Disease Control Cancer and Steroid Hormone Study⁴ (CASH⁴) found women with ovarian cancer were more likely to be nulliparous, under 30 years old, and to have been diagnosed with an infertility problem. The relative risk for developing ovarian cancer in women who had used oral contraceptives, compared to women who had never used oral contraceptives, was 0.6. The risk decreased with increasing duration of oral contraceptive use. Women who had used oral contraceptives for five years or more had a risk of 0.4. The decreased risk was found across all age groups, with less than 1.0 relative risk in each age group studied. Nulliparous women had a relative risk of 0.3, while parous women were closer to, but still less than 1.0. No distinction was made between women who had epithelial ovarian cancer and women who had nonepithelial ovarian cancer. The authors concluded the risk for the two tumor categories did not differ because a relative risk of less than 1.0 was found in all age groups. The study found that women who had used oral contraceptives at some time had a significantly decreased risk of developing ovarian cancer, in comparison to women who had never used oral contraceptives, and that this decreased risk persisted long after discontinuation.

The CASH⁴ study was updated in 1987 in the *New England Journal of Medicine*.⁵ The completed report used data collected from the entire study period and found that oral contraceptive use for even a few months decreased the risk of epithelial ovarian cancer by 40% for women between 20 and 54 years of age. Reduced risk persisted for 15 years after discontinuation and took 5 to 10 years to become apparent. Reduced risk was not limited to any one formulation, and was not affected by duration of use or time since first use. Association between sex cord-stromal tumors and oral contraceptives could not be assessed, due to the small number of cases. An estimated 1,700 cases of ovarian cancer were prevented in 1982

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by the use of oral contraceptives.⁵

A study by Vessey et al.¹¹ found a 50% reduction in risk for women who had used oral contraceptives, compared to those who had never used oral contraceptives. No conclusions were made concerning the increase in protection with increased duration of use or persistence of protection.

Derman¹ and Holck,¹⁰ in independent reviews of nine case-control studies from 1977 to 1983, concluded oral contraceptives significantly reduce the risk of developing ovarian cancer. Holck,¹⁰ in addition, stated that reduced risk was associated with increasing duration of use and persisted for at least 10 years after discontinuation.

Conclusion. Use of oral contraceptives decreases a woman's risk of developing epithelial ovarian cancer by as much as 50%. The protective effect increases with increasing duration of use and lasts for at least 10 years after discontinuation. Further study is required before conclusions can be made concerning the effect of oral contraceptives on the risk of developing nonepithelial ovarian cancer. In the United States, the age-adjusted incidence of ovarian cancer has not changed in the past 40 years. A declining incidence of ovarian cancer may be seen as the majority of women who have used oral contraceptives enter age groups that are at highest risk.

Cervical Cancer

Epidemiology and Etiology. Fifty years ago, cervical cancer was the leading cause of cancer deaths among women in the United States. In women today, cervical cancer is the sixth leading cause of cancer death, preceded by breast, lung, colon, ovarian and pancreatic cancers. The decreased incidence can be attributed largely to use of the Papanicolaou cytologic test, which contributes to early detection of precursor lesions. In 1989, 13,000 new cases of cervical cancer and 7,000 deaths were anticipated. Cervical cancer is the second most common malignancy of the female reproductive tract and most commonly affects women between the ages of 40 and 55.⁶ Cervical cancer is currently regarded as a venereal disease. Certain infectious or oncogenic agents are thought to be sexually transmitted, such as papilloma virus, especially types 16 and 18. Other risk factors thought to play a role in the etiology of cervical cancer include low socioeconomic status, early age of first coitus and multiple sex partners.^{2,12,18}

Literature Review. In the past 20 years, over a dozen major epidemiologic studies have been

conducted. Swan and Petitti²⁸ reviewed 12 major studies conducted prior to 1982. The results were found to be inconclusive. Three studies reported a significant increase in risk of cervical cancer in oral contraceptive users, and seven found no statistically significant increase in risk. The authors concluded the inconsistencies may be partially explained by the many complex biases and the important confounding variables which are inherent in all of the studies reviewed.

In reviewing six additional case-control and prospective studies, Ebeling et al.,⁹ found an increased risk of invasive cervical cancer associated with the use of oral contraceptives. Four of the studies also showed increasing risk with increased duration of use. The results were questioned by Ebeling et al.,⁹ as the studies did not take into account possible confounding factors, such as sexual behavior and time since last Pap test. The initial review by Ebeling et al.⁹ concurred with previous reports showing an increased risk of cervical cancer in women who used oral contraceptives. However, after adjustment for factors such as sexual behavior, time since last Pap test, smoking and discharge, the increased risk for users of oral contraceptives diminished. Categories which remained statistically significant for increased risk were long-term use (longer than seven years) and early onset of use (under 24 years of age), with relative risks of 1.76 and 3.04, respectively. Increased risk with increasing duration of use fell after being adjusted for age at first use. Early age at first use was determined to have the highest relative risk, with the risk remaining elevated even after adjustment for the duration of use.

A study by Brinton et al.¹⁸ found use of oral contraceptives to be a risk factor for all tumor types, but especially adenocarcinoma of the cervix. Holck¹⁰ also concluded there was a small increased risk of invasive cervical cancer in women who use oral contraceptives.

Recent independent studies by Irwin et al.²⁶ and Celentano et al.²⁰ reported no increased risk of cervical cancer in women who used oral contraceptives, compared with women who had never used oral contraceptives. In fact, Celentano et al.²⁰ found oral contraceptive use to be protective against invasive disease, with a reported relative risk of 0.48. The authors concluded the protective effect reflected increased screening among oral contraceptive users, rather than a biologically protective effect.

Conclusion. Studies in the past have yielded inconsistent and conflicting results. Many biases and

confounding factors make study of cervical cancer and its association with oral contraceptive use difficult. An important source of bias is the difference in the frequency of Pap tests between oral contraceptive users and non-users. Many studies failed to exclude from control groups women who used a barrier method of contraception. Use of barrier contraception has been shown to lower the risk of cervical cancer.³⁰ Cervical neoplasia is commonly preceded by atypia and dysplasia which are detected by the Pap test. Classification of the Pap test is subjective, which may lead to misclassification biases. Cervical cancer is currently regarded as a venereal disease; however, many studies failed to provide information on sexual behavior. Socioeconomic variables are important in the etiology of cervical cancer and are also potential confounders. In view of the factors discussed, separating a true elevation in risk from an elevation in risk due to bias and other confounding factors is extremely difficult. An appropriate study should consider information on sexual behavior and socioeconomic variables. Fixed screening for Pap tests would be necessary, as would standardized guidelines for classification of the Pap tests. A final factor to be considered is the dosage of the oral contraceptive, as women today are usually prescribed lower-dose oral contraceptives, while the women involved in many of the studies received higher-dose oral contraceptives. Further investigation is required.

Breast Cancer

Epidemiology and Etiology. Breast cancer is the most common malignancy among women and shares with lung cancer the highest fatality rate of all cancers affecting women.⁷ One of every eleven women will develop cancer of the breast at some time during her life.² Most cases occur between the ages of 40 and 70, but the risk increases with age. Risk factors associated with the development of breast cancer are age greater than 40, obesity, urban residence, mother or sister with breast cancer, previous cancer of the breast, previous cancer of the endometrium or ovary, irradiation to the breast, postmenopausal exogenous estrogen exposure, menarche prior to age 12, menopause after age 55, nulliparity, and first full-term pregnancy after age 30.^{1,6,19}

Literature Review. In the past 10 years, there have been numerous studies concerning the effect of oral contraceptive use on the development of breast cancer. Conflicting results have been reported in a number of studies.

The largest of these, The Center for Disease Control Cancer and Steroid Hormone Study (CASH),^{6,17} found women who had used oral contraceptives had a relative risk of 0.9 for developing breast cancer, compared with non-users. Neither duration of use nor time since first use changed the risk of developing breast cancer. Women who had used oral contraceptives more than 15 years prior to the study, and who were users for eleven years or more, had a relative risk of 0.8. Oral contraceptive use prior to first pregnancy did not change the relative risk for developing breast cancer. Women who had a positive family history of breast cancer or who had benign breast disease did not have an increased risk, compared with non-users. An analysis of the CASH^{6,17} study data by Schlesselman and coworkers²³ found a risk of 1.0 for developing breast cancer for women 20 to 44 years of age who had used oral contraceptives prior to their first term pregnancy.

A study conducted by Paul and coworkers¹³ in New Zealand found similar results with a relative risk factor of 0.94 for oral contraceptive users as compared with non-users. No increase in risk was associated with age at first use, time since first



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use, or duration of use. Women who used oral contraceptives before age 25, or before their first pregnancy, even for prolonged periods, did not have an increased risk of developing breast cancer.

Results reported by Miller et al.¹⁴ also yielded similar results. The relative risk was 1.0 for nulliparous women and 0.6 for women who had used oral contraceptives prior to their first term pregnancy. No evidence of an increased risk in any subgroup was found, including those at increased risk due to family history of breast cancer or history of cystic breast disease.

In 1981, Pike et al.²⁷ reported an increased risk for women under age 33 who used oral contraceptives prior to their first term pregnancy. An extension of the study in 1983^{15,16} reported an increased risk associated with oral contraceptive use before age 25.

A study from Sweden and Norway²² found a relative risk of 2.2 for women who had used oral contraceptives for 12 or more years, as compared with non-users. Oral contraceptive use for seven years prior to first term pregnancy was associated with a relative risk of 2.0. An association between age at first use and development of breast cancer was not found. The report concluded that long-

term use of oral contraceptives may increase the risk of breast cancer in young women.

The most recent study, conducted by Chilvers and McPherson,²⁹ looked at women diagnosed with breast cancer before age 36. The authors found a relative risk of 1.43 for 49 to 96 months' use, and 1.74 relative risk for 97 or more months' use. The relative risks were similar for use before and after first full-term pregnancy. The authors also found evidence that the risk is less for women who used oral contraceptives containing less than 50µg estrogen. The report concluded there is a substantial causal relation between prolonged oral contraceptive use and breast cancer in young women, and that this excess risk is transient, diminishing or disappearing at older ages (oral contraceptive use beginning at age 25 or older). The report further stated some of the relative risks may be slightly exaggerated, due to possible bias. The authors will be conducting further studies on women aged 36 to 45 to provide better data on the effects of long-term use of oral contraceptives containing less than 50µg of estrogen. And finally, the authors themselves pointed out there is no support for their findings in national breast cancer registration rates, which are not increasing.

Conclusion. The conflicting reports make a definitive conclusion difficult. The now widely prescribed low-dose oral contraceptives make interpretation even more difficult. Will they yield the same results as the once widely prescribed high-dose oral contraceptives? The majority of studies report a relative risk close to 1.0, although the occasional study does report an increased risk associated with oral contraceptive use. One reason for not accepting any current study as providing a final answer is the latency associated with developing breast cancer. The formation of a palpable breast cancer may take 20 years. It may be too soon to expect an epidemiological relation between breast cancer and oral contraceptives.²¹ Further study is required for a definitive answer, but until then prescribing habits need not change.²⁴

Liver Cancer

In the United States, hepatocellular carcinoma is found chiefly in males (male:female ratio of 9:1) who are elderly and have cirrhotic livers. In other parts of the world, hepatocellular carcinoma is linked to the hepatitis B virus.²⁵

It is generally felt that women who use oral contraceptives do not have an increased risk of developing hepatocellular carcinoma,¹⁰ but

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women who use these contraceptives do have an increased risk for developing hepatocellular adenomas. The prevalence of these tumors has increased, due to the widespread use of oral contraceptives, and they occur primarily in women of childbearing age. The incidence of adenomas varies from 1/30,000 to 1/500,000 oral contraceptive users,¹⁰ most of which will usually decrease in size and disappear when oral contraceptives are discontinued.

Summary

Substantial evidence exists to suggest that the use of oral contraceptives alters the risk for some types of cancer. Use of oral contraceptives for one year or more will reduce the risk of endometrial cancer and epithelial ovarian cancer by 50%, with the protective effect lasting for at least 10 years. The risk for developing cervical cancer in women who have used oral contraceptives appears to be slightly increased, although two independent studies actually found a protective effect associated with oral contraceptive use. The protective effect was probably related to the increased screening frequency found in oral contraceptive users and not related to a biologically protective effect. There-

fore, women should be encouraged to undergo regular Pap tests. Data regarding breast cancer, in general, show no increased risk associated with oral contraceptive use. The latency associated with the development of breast cancer does not allow a definitive conclusion, and further study will be required. Oral contraceptives appear to increase the risk for developing benign hepatocellular adenoma, but not hepatocellular carcinoma.

REFERENCES

A complete list of references is available from the author upon request.

3. Ory HW, et al. Combination oral contraceptive use and the risk of endometrial cancer. The Cancer and Steroid Hormone Study of the Centers for Disease Control and The National Institute of Child Health and Human Development. *JAMA* 257(6):796-800, 1987.
5. Ory HW, et al. The reduction in risk of ovarian cancer associated with oral contraceptive use. The Cancer and Steroid Hormone Study of the Centers for Disease Control and The National Institute of Child Health and Human Development. *N Engl J Med* 316(11):650-55, 1987.
9. Ebeling K, et al. Use of oral contraceptives and risk of invasive cervical cancer in previously screened women. *Int J Cancer* 39(4):427-30, 1987.
10. Holck S. Hormonal contraceptives and the risk of cancer. *World Health Statistics Quarterly* 40(3):225-32, 1987.
13. Paul C, et al. Oral contraceptives and breast cancer: A national study. *Br Med J* 293(6549):723-26, 1986.
14. Miller DR, et al. Breast cancer risk in relation to early oral contraceptive use. *Obstet Gynecol* 68(6):863-68, 1986.
15. McPherson K, et al. Early oral contraceptive use and breast cancer: Results of another case-control study. *Br J Cancer* 56(5):653-60, 1987.
16. McPherson K, Drife J. The pill and breast cancer: Why the uncertainty? *Br Med J* 293(6549):709-10, 1986.
28. Swan S, Petitti D. A review of problems of bias and confounding in epidemiologic studies of cervical neoplasia and oral contraceptive use. *Am J Epidemiol* 115(1):10-18, 1982.
29. Chilvers C, McPherson K. Oral contraceptive use and breast cancer risk in young women. *Lancet* 973-82, 1989.

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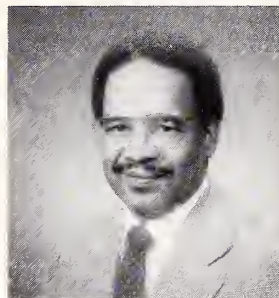
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Retirement on the Yellow Brick Road

SUSAN WARD, *Production Editor**

I do not have as much time to take care of cattle, catch fish, garden and vacation as I had when I was practicing medicine," says retired physician and surgeon William K. Walker, M.D., who traded his medical office for political office as mayor of Sedan, Kansas (population: 1,500). "I do miss helping people with their medical problems, but I do not miss the DRGs," he adds.

Dr. Walker found another way to help the people of his town when he became mayor. Sedan, like so many small Kansas towns, was in an economic slump; within one year 10 businesses folded. The downtown area needed to be refurbished, and community spirit was low.

So when one of the town's citizens came up with an idea to raise both money and spirits, Dr. Walker supported it wholeheartedly. The plan was to construct a "Yellow Brick Road" in the pavement of the downtown sidewalks. Inscribed bricks for the road were sold for \$10 apiece, and the profits were used for other improvements, such as bright red wooden benches.

The word soon spread far beyond Sedan's boundaries. More than 800 letters were sent to graduates of Sedan High School who had relocated throughout the country, and they responded enthusiastically. A local chiropractor went to a chiropractic seminar in Japan and came back with donations from 175 of his Japanese colleagues. To date, contributions to the Yellow Brick Road Fund have been received from every state in the union, and from eight foreign countries. The project was featured in the May 1990 issue of *Good Housekeeping*.

Businesses in neighboring towns purchased bricks for their advertising value, and individuals bought bricks inscribed with their own names, romantic messages and memorials. Sedan is the birthplace of famed clown Emmett Kelly and has a museum in his honor, so a special Emmett Kelly brick was laid in the sidewalk in front of the build-

ing. Other dignitaries, including all of Sedan's mayors, are memorialized in brick nearby.

As work progressed, it became necessary to replace some concrete adjacent to the Yellow Brick Road, but funds were limited. Dr. Walker was donating his mayor's salary to the Chamber of Commerce, so he instructed the Chamber to pur-



Dr. Walker (with trowel in hand) helps to lay a section of the Yellow Brick Road in front of the Emmett Kelly Museum.

chase the concrete, as well as materials for some flowerbeds to enhance the appeal of the downtown area.

Another inducement to shop in Sedan is the "bellringer money," which also comes from Dr. Walker's salary. Each month two stores in town receive \$20 each, and one item in each store is selected as the secret item, known only to the mayor and the store personnel. When a customer buys the item, he or she receives the bellringer money as a prize. One month a shopkeeper agonized over possible conflict-of-interest allegations as Mrs. Walker unwittingly admired the secret item while shopping for a wedding gift. The store owner's dilemma was resolved when the mayor's wife selected another item instead.

* Send correspondence to Dr. Walker at 417 N. Montgomery, Sedan, Kansas 67361.

Send your story for "The Days of Our Age" to KANSAS MEDICINE, Attn. Susan Ward, 1300 Topeka Avenue, Topeka, Kansas 66612.



Dr. Walker, assisted by his former secretary of 33 years, stamps inscriptions onto the "bricks."

Sedan already has its next civic improvement project lined up. A Sedan High School graduate, now a businessman in Texas, gave the town an English double-decker bus, which needs to be refurbished in time for its scheduled debut in an Arkansas City parade on October 29. It will carry advertising from businesses in Sedan — of course — and is expected to appear regularly in area parades.

"Since I became mayor," says Dr. Walker, "the Yellow Brick Road has lifted the [town's] spirits,



and the whole place is improved." Still, he is "up to my ears with city problems as mayor. This is my first time in politics. I have decided it will be my last."

And when his term is up? Then perhaps there will be more time for fishing, deer hunting, gardening and entertaining the grandchildren with his motorcycle. And maybe more time for his rowboat, which Dr. Walker enjoys because "I can get my exercise sitting down." Dr. Walker recalls with pleasure trips to Alaska, Oregon and Arizona before he became mayor. Perhaps there will be more traveling.

Unless, of course, Sedan embarks on another town improvement project.

This article continues our ongoing series describing the various lifestyles enjoyed by our retired physicians. Let your fellow KMS members know what life is like now that you have retired. Do you enjoy your new lifestyle? What do you do for recreation? Do you have a new career? Is your health good? Did you plan adequately for your retirement? How? What would you do differently if you were planning now to retire? Any of these subjects, plus many more, are fair game for this column. Send us your thoughts today!

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Left Ventricular Function: Is It a Gold Standard for Comparing Thrombolytic Agents?

DONALD L. VINE, M.D.,* *Wichita*

The use of the left ventricular ejection fraction as a means of comparing the effectiveness of lytic agents for the treatment of acute myocardial infarction is appealing because the sample sizes required to show a 5% improvement in ventricular function are less than those required to show a similar change in mortality.

Observed Discrepancies

Van de Werf reviewed the randomized trials which studied both left ventricular function and mortality among patients receiving lytic therapy or placebo.¹ He identified six studies, which are illustrated in Figure 1.

In terms of statistical significance, the trials showing improved ventricular function do not generally demonstrate a mortality benefit, and those showing reduced mortality do not show improved ventricular function.

This discrepancy between improvement of ventricular function and reduction in mortality is more vividly illustrated by what Van de Werf calls the "time-of-treatment" paradox. When studies such as the European Cooperative Trial of tissue plasminogen activator, which compare left ventricular function and mortality of patients treated early with that of patients treated later, the mortality reduction is statistically significant among patients treated at less than three hours, while the improvement in left ventricular ejection fraction is significant only among the patients treated later than three hours. This is illustrated in Figure 2. Similar findings have been reported for the Western Washington and ISAM trials.

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Address correspondence to Dr. Vine, Department of Medicine, UKSM-W, 1010 N. Kansas, Wichita, KS 67214.

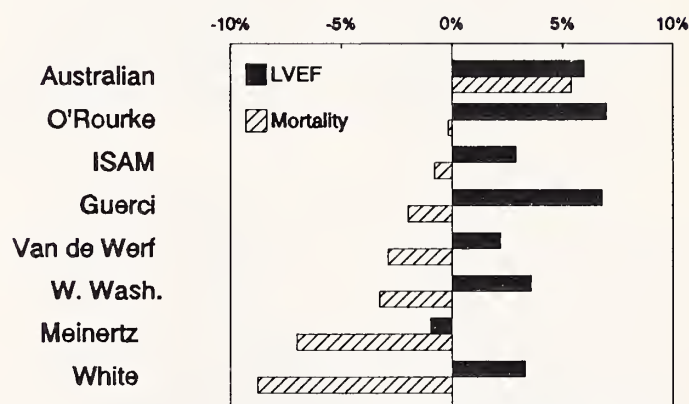


Figure 1. Mortality and left ventricular function (Van de Werf, *Lancet* 6/89).

Conjecture

Two likely explanations for these observations are discussed by Dr. Van de Werf — the possibility that lytic therapy works, in part, by means other than preservation of ischemic myocardium, and the possibility that beneficial effects on mortality obscure the expected improvement in ejection fraction.

Factors which might affect survival by other means than reducing the amount of damage include reduction of arrhythmias, prevention of ventricular rupture, prevention of post-infarct dil-

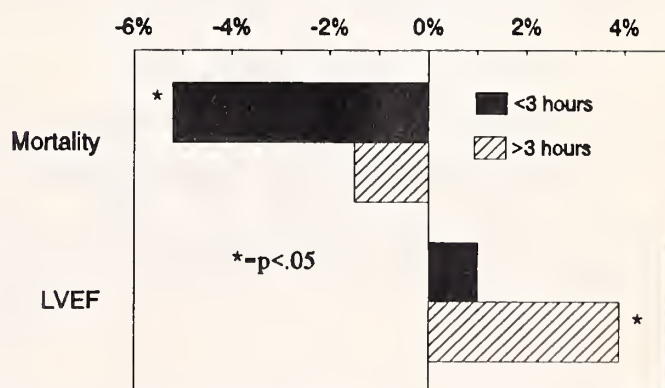


Figure 2. Mortality and left ventricular function: early versus late treatment (Van de Werf, *Br Med J* 1988).

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atation and preservation of collateral flow to arterial regions which undergo later occlusion. There are clinical studies supporting each of these mechanisms.

There seems to be a contradiction when data demonstrate improved ventricular function without improved survival and vice versa. According to Van de Werf, it is arguable that effective lytic therapy prevents some early deaths among patients with very poor ejection fractions. These patients' low ejection fractions are added to those of the other survivors, and the overall average of the treated patients is reduced. Among the control patients, the death of patients with very low ejection fractions eliminates them from ejection fraction averaging and further obscures the benefit of lytic therapy on left ventricular function.

Implications

If the more effective lytic agents indeed prevent death in some patients with very low ejection fractions, then follow-up ejection fraction may not be a good index of the relative effectiveness of different lytic agents.

If mechanisms other than preservation of ischemic myocardium are important to the benefits of thrombolysis, then patients who present later than six hours may also require lytic therapy.

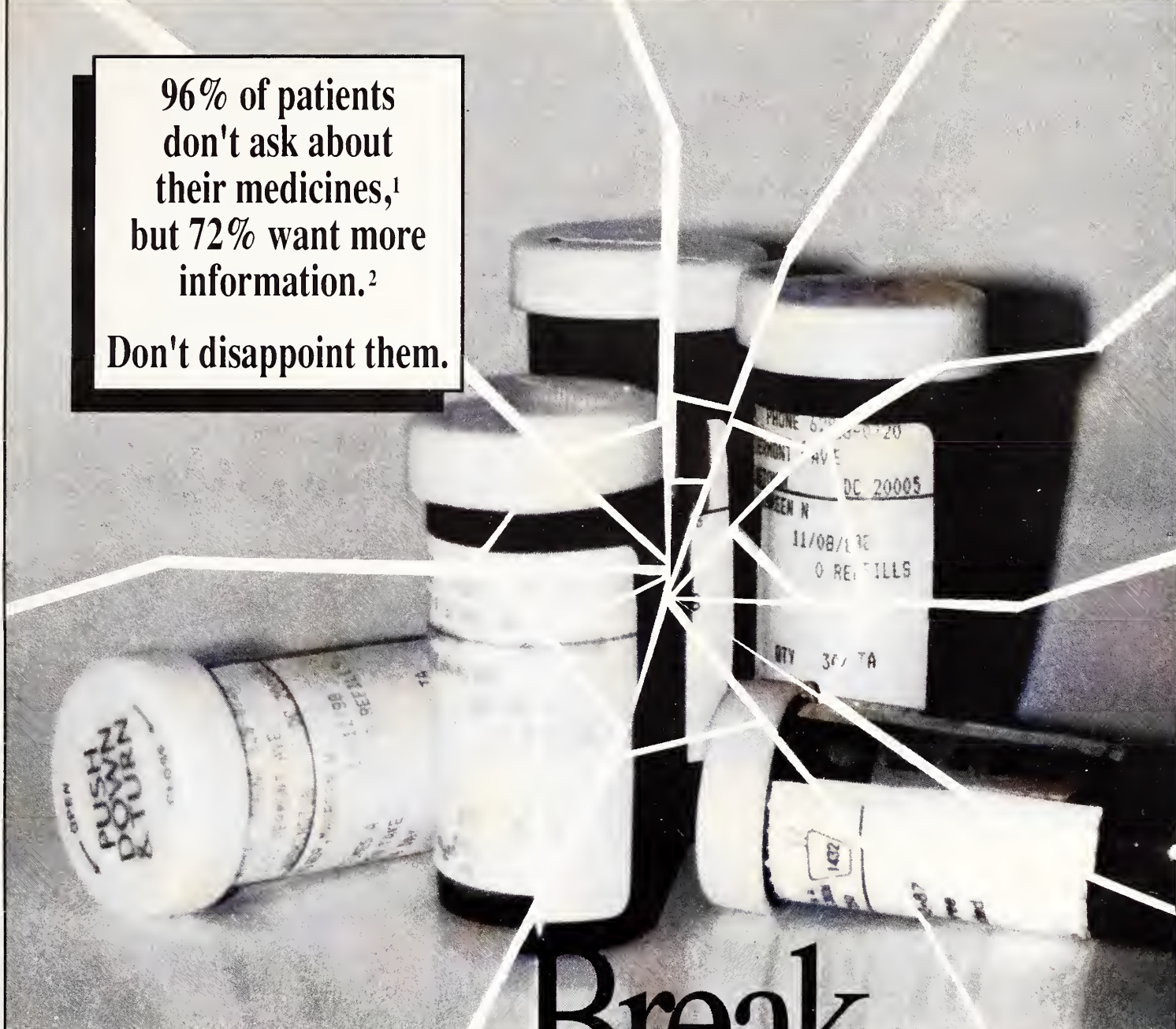
REFERENCES

1. Van de Werf F. Discrepancies between the effects of coronary reperfusion on survival and left ventricular function. *Lancet* 1989;1:1367-68.
2. Van de Werf F, Arnold AER. Intravenous tissue plasminogen activator and size of infarct, left ventricular function, and survival in acute myocardial infarction. *Br Med J* 1988;297:1374-79.

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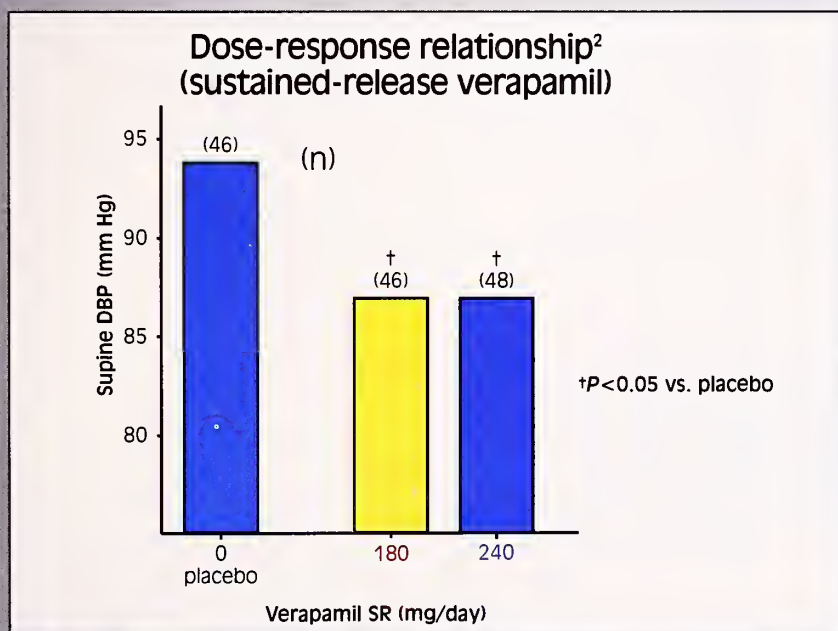


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Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol clearance may occur with combined use. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration.

Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°, 2°, 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, increased urination, spotty menstruation, impotence.

References:

1. 1988 Joint National Committee: The 1988 report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. *Arch Intern Med* 1988;148:1023-1038.
2. Data on file, G.D. Searle & Co.

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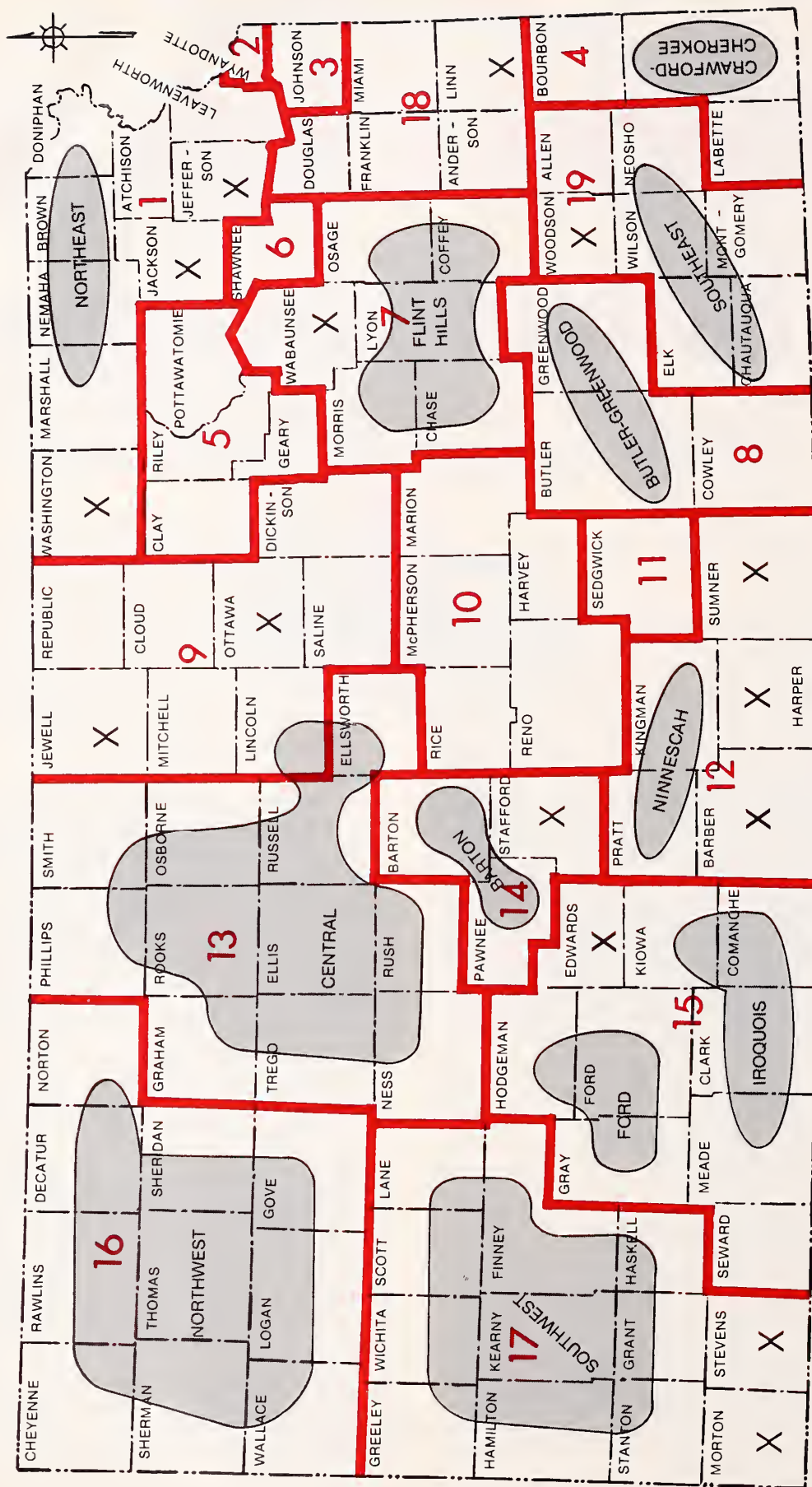
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References

1. *USP DI Update*, September/October 1988, p 120.
2. *Br J Clin Pharmacol* 1985;20:710-713.
3. Data on file, Lilly Research Laboratories.
4. *Scand J Gastroenterol* 1987;22(suppl 136):61-70.
5. *Am J Gastroenterol* 1989;84:769-774.

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Brief Summary. Consult the package literature for complete information.

Indications and Usage: 1. *Active duodenal ulcer*—for up to eight weeks of treatment. Most patients heal within four weeks.

2. *Maintenance therapy*—for healed duodenal ulcer patients at a reduced dosage of 150 mg h.s. The consequences of therapy with Axid for longer than one year are not known.

Contraindication: Known hypersensitivity to the drug. Use with caution in patients with hypersensitivity to other H₂-receptor antagonists.

Precautions: *General*—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Dosage should be reduced in patients with moderate to severe renal insufficiency.

3. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

Laboratory Tests—False-positive tests for urobilinogen with Multistix[®] may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chloridazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given

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an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events was due to the drug.

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Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to three times the upper limit of normal, however, did not significantly differ from that in placebo patients. Hepatitis and jaundice have been reported. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Because cross-sensitivity among this class has been observed, H₂-receptor antagonists should not be administered to those with a history of hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

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Additional information available to the profession on request.



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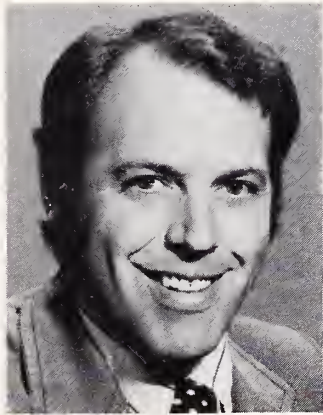
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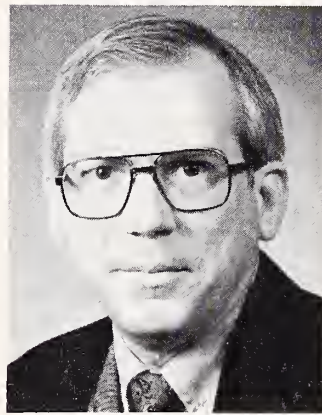
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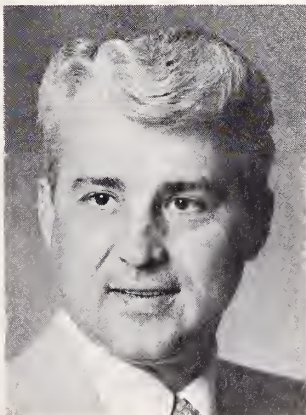
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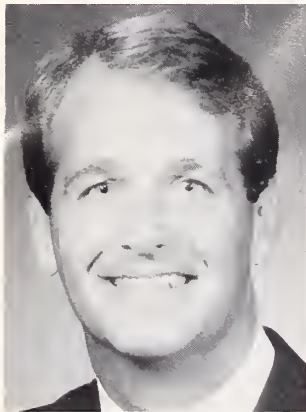


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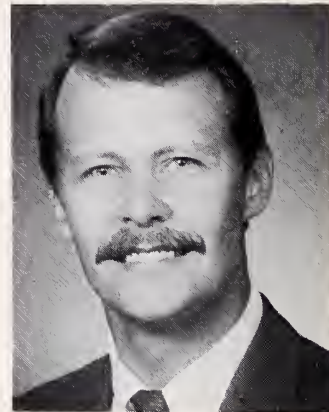
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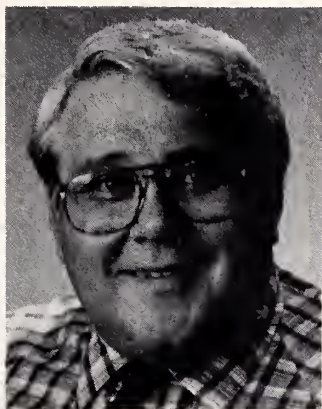
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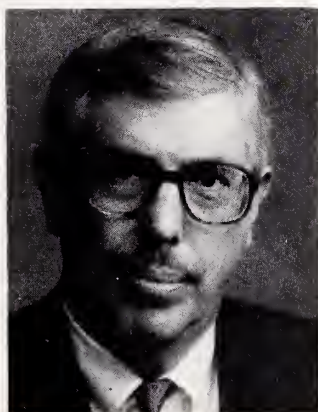
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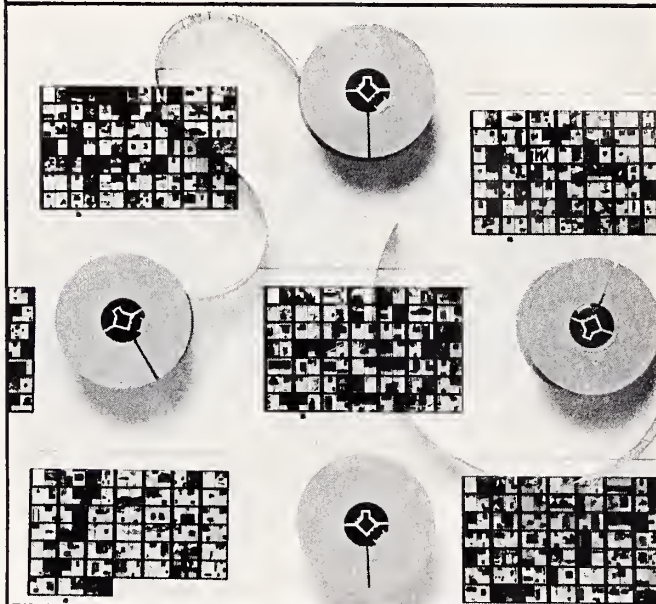


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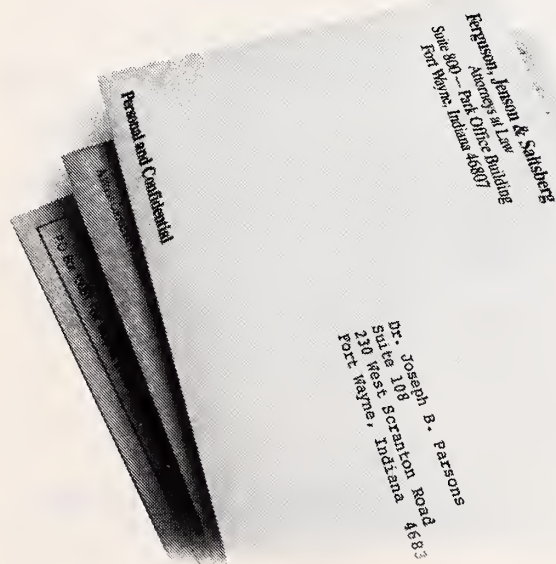
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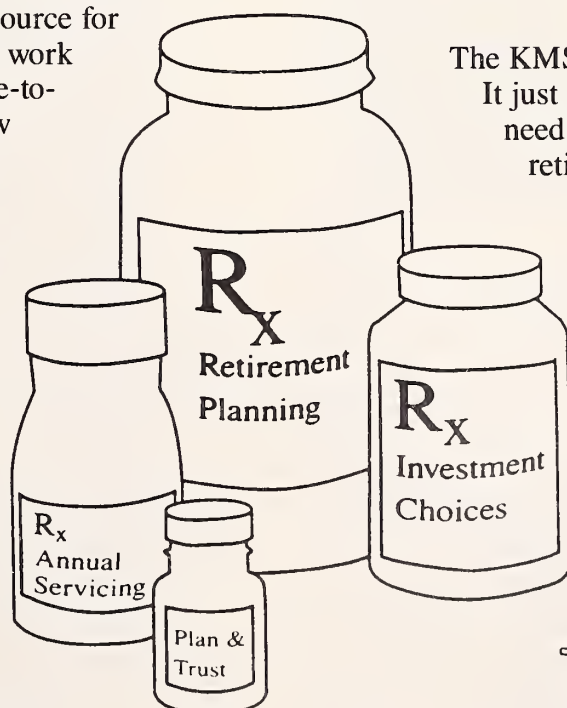
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Preamble:

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- I. A physician shall be dedicated to providing competent medical service with compassion and respect for human dignity.
- II. A physician shall deal honestly with patients and colleagues, and strive to expose those physicians deficient in character or competence, or who engage in fraud or deception.
- III. A physician shall respect the law and also recognize a responsibility to seek changes in those requirements which are contrary to the best interests of the patient.
- IV. A physician shall respect the rights of patients, of colleagues, and of other health professionals, and shall safeguard patient confidences within the constraints of the law.
- V. A physician shall continue to study, apply and advance scientific knowledge, make relevant information available to patients, colleagues, and the public, obtain consultation, and use the talents of other health professionals when indicated.
- VI. A physician shall, in the provision of appropriate patient care, except in emergencies, be free to choose whom to serve, with whom to associate, and the environment in which to provide medical services.
- VII. A physician shall recognize a responsibility to participate in activities contributing to an improved community.

(AMA House of Delegates, July 20-24, 1980)

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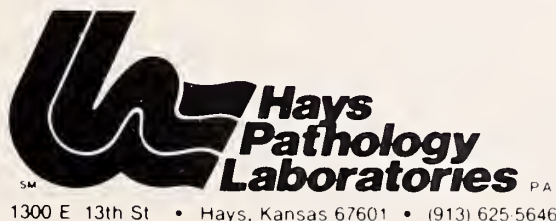
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Center, P.O. Box 738 67357 — 316/421-6550

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- Phillipsburg** 67661
Phillips County, Court House —
913/543-2179
- Pittsburg** 66762
Crawford County, Centennial & Rouse —
316/231-5411
- Pratt** 67124
Pratt County, 127 S. Howard — 316/672-7436
- Sabetha** 66534
Nemaha County, 716 S. 11th — 913/284-2288
- Salina** 67401
Salina-Saline County, 300 W. Ash —
913/827-9376
- Shawnee Mission**
Always Better Care, Inc., 10111 Santa Fe Drive
66212 — 913/888-4447
Home Health-Home Care, Inc., 8900 State Line,
Suite 332 66206 — 913/341-8830
Medical Personnel Pool of Kansas City, 7600
State Line, Suite 200 66208 —
913/341-2181
- Stockton** 67669
Rooks County, Court House — 913/425-7352
- Topeka**
Topeka-Shawnee County, 1615 W. 8th 66606 —
913/233-8961
Associated Healthfocus, 1925 SW 6th, 66604 —
913/232-1253
- Troy** 66087
Doniphan County, Court House, P.O. Box 201 —
913/985-3886
- Ulysses** 67880
Bob Wilson Memorial, 415 N. Main —
316/356-1266
- Washington** 66968
Washington County, 115 W. 3rd —
913/325-2600

Wellington 67152

Sumner County, Court House — 316/326-2774

Westmoreland 66549

Pottawatomie Cty., 320 Main — 913/457-3719

Wichita

Agency for Home Health Care of Kansas,
3333 E. Central, Suite 503 67208 —
316/681-1632

Kansas Masonic Home, 401 S. Seneca 67213 —
316/267-0271

Medical Personnel Pool, 1035 Parklane 67218 —
316/686-3388

Professional Care Associates, 959 N. Emporia, Suite
303 67214 — 316/268-8588

Wesley Care, 550 N. Hillside 67214 —
316/688-7272

Wichita-Sedgwick County, 1900 E. 9th 67214 —
316/268-8433

Winfield 67156

William Newton Memorial Hospital,
1300 E. 5th — 316/221-2300

GENETIC COUNSELING CENTERS

Garden City — Genetic Outreach Clinic, Garden
Medical Center, Call 316/688-2360 (Wichita)

Hays — Post Rock Pediatric Clinic —
913/628-6128, Ext. 29, or Kansas City Center

Kansas City — Department of Endocrinology,
Division of Genetics, KUMC, 39th & Rainbow
Blvd., Kansas City, KS 66103 — 913/588-6043,
R. Neil Schimke, M.D., Director; Debra L.
Collins, M.S., Genetic Counselor

Parsons — Genetic Outreach Clinic, Labette
County Medical Center, Call 316/688-2360

Parsons — Parsons State Hospital & Training
Center — 316/421-6550, Ex. 227, or Kansas City
Center

Salina — Asbury-Salina Hospital, P.O. Box 1608
— 913/827-9376, or Kansas City Center

Wichita — Genetic Clinic, Department of
Pediatrics, UKSM-Wichita, 1010 N. Kansas,
Wichita, 67214 — 316/261-2622

Wichita — Prenatal Diagnosis & Genetic Clinic,
Division of Perinatal Medicine, Wesley Medical
Center/UKSM-Wichita, 550 N. Hillside, Wichita
67214 — 316/688-2360

EATING RIGHT CAN HELP REDUCE THE RISK OF CANCER.

It can also help you reduce your weight.

And since a 12-year study shows that being 40% or more overweight puts you at high risk, it makes sense to follow these guidelines for healthy living! **Eat plenty of fruits and vegetables rich in vitamins A and C—**oranges, cantaloupe, strawberries, peaches, apricots, broccoli, cauliflower, brussel sprouts, cabbage. **Eat a high-fiber, low-fat diet that includes whole-grain breads and cereals such as oatmeal, bran and wheat. Eat lean meats, fish, skinned poultry and low-fat dairy products. Drink alcoholic beverages only in moderation.**

For more information, call 1-800-ACS-2345.



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FAMILY PRACTITIONER,
GENERAL SURGEON**

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Rice Lake, WI 54868
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Wisconsin

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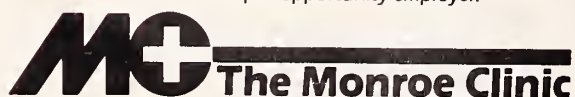
Specialties

- Allergy
- Cardiology
- Dermatology
- Emergency Medicine
- Family Practice
- Internal Medicine
- Neurology
- Obstetrics & Gynecology
- Ophthalmology
- Orthopedics
- Otolaryngology
- Psychiatry

The Monroe Clinic associates provide the highest continuum for patient care and you have easy access to peers or specialists for consultation without the distractions of office management.

For an early prescription to a lasting, equitable partnership, please call or send your curriculum vitae to Robert Enterline, Physician Staffing Director, The Monroe Clinic, 1515 Tenth Street, Monroe, Wisconsin 53566.

"equal opportunity employer."



**WORKERS' COMPENSATION
INSURANCE**

**Helpful Hints on
Audit Procedures**

At the expiration date of your policy year, an audit is made by the insurance company to determine the actual payroll amounts, or other exposures during the year. Following this audit, an adjustment may be made that will require additional premium, or a return or credit will be ordered. Following are five tips to assist you in preparing for an audit. These sources will help the auditor:

- Payroll journal providing monthly totals and division of payroll by type of work performed.
- Individual earning records indicating the type of work performed. Gross payroll should be totaled by the quarter.
- Separate record of overtime shown by employee and totaled by class of work for the policy term involved. (Premium for Workers' Compensation is based on straight time pay for all hours worked and does not include 1/2 extra pay for overtime.) (Not applicable in Delaware, Pennsylvania, and Utah.)
- Certificates of Workers' Compensation Insurance for all insured sub-contractors.
- Social Security (Form 941) and State Unemployment Compensation quarterly returns.

Auditors are instructed to inform you of the date they intend to call on you or to arrange in advance for a convenient time. To assure accurate assignment of your payroll in the proper classes, it is wise for you to arrange to have someone in your organization familiar with employee job assignments available to work with the auditor during the course of the audit.

If your records are kept by an outside accounting firm, make certain the accountants are aware of the impending visit by the auditor so they will have your records available when needed. In the event the accountant is not well informed regarding the duties of various employees, you may wish to brief him/her in advance of the auditor's visit.

In the audit of your payroll for final billing purposes, you need to determine that the payroll of individual employees is assigned to the appropriate rating classification. This assures that you will be paying the correct premium.

Annual premiums in excess of a specified amount qualify for a discount which varies by state and also by the amount of premium needed to be eligible for the discount. Contact your sales representative if you have any questions about discounts or classifications.

HIV Counseling and Testing Sites in Kansas

<u>Agency</u>	<u>Telephone</u>	<u>Agency</u>	<u>Telephone</u>
ARKANSAS CITY		KANSAS CITY	
Cowley County H.D.	(316) 442-3260	Kansas City-Wyandotte	(913) 321-4803
ATCHISON		County H.D.	ext. 423
Atchison County H.D.	(913) 367-5152	LARNED	
BAXTER SPRINGS		Pawnee County H.D.	(316) 285-6963
Richard M. Chubb, M.D.	(316) 856-2144	LAWRENCE	
CLAY CENTER		Douglas County H.D.	(913) 843-0721
Clay County H.D.	(913) 632-3193	LEAVENWORTH	
COFFEYVILLE		Leavenworth County H.D.	(913) 684-0730
Montgomery County H.D.	(316) 251-4210	LIBERAL	
COLBY		Seward County H.D.	(316) 624-3804
Colby Community College	(913) 462-3984	LYNDON	
	ext. 296	Osage County H.D.	(913) 828-3117
Thomas County H.D.	(913) 462-7679	MANHATTAN	
COLUMBUS		Riley County H.D.	(913) 776-4779
Cherokee County H.D.	(316) 429-3087	McPHERSON	
CONCORDIA		McPherson County H.D.	(316) 241-1753
Cloud Cty. Publ. Health	(913) 243-3588	MISSION	
DIGHTON		Johnson County H.D.	(913) 791-5660
Lane County H.D.	(316) 397-2333	NEWTON	
DODGE CITY		Harvey County H.D.	(316) 283-6900
Dodge City Family		OLATHE	
Planning Clinic	(316) 225-1933	Johnson County H.D.	(913) 782-9400
EL DORADO		OSKALOOSA	
Butler/Greenwood H.D.	(316) 321-3400	Jefferson Cty. H.D.	(913) 863-2447
EMPORIA		OTTAWA	
Lyon County H.D.	(316) 342-4864	Franklin County H.D.	(913) 242-1873
FORT SCOTT		PARSONS	
SEK Multi-County H.D.	(316) 223-4464	Labette County H.D.	(316) 421-4350
FREDONIA		PHILLIPSBURG	
Wilson County H.D.	(316) 378-4455	Phillipsburg Cty. H.D.	(913) 543-2179
GARDEN CITY		PITTSBURG	
M*A*S*H	(316) 275-4077	Crawford County F.P.	(316) 231-3200
Finney County H.D.	(316) 276-2781	PRATT	
GOODLAND		Pratt County H.D.	(316) 672-7436
Sherman County H.D.	(913) 899-5627	RUSSELL	
GREAT BEND		Russell County H.D.	(913) 483-6433
Barton County H.D.	(316) 793-7879	SALINA	
HAYS		Saline County H.D.	(913) 827-9376
Ellis County H.D.	(913) 628-9440	STOCKTON	
HIAWATHA		Rooks County H.D.	(913) 425-7352
Brown County H.D.	(913) 742-7192	TOPEKA	
HOISINGTON		Shawnee County H.D.	(913) 233-5141
Clara Barton Hosp.	(316) 653-2114	ULYSSES	
HUTCHINSON		Grant County H.D.	(316) 356-1545
Reno County H.D.	(316) 665-2900	WICHITA	
IOLA		Sedgwick County H.D.	(316) 268-8441
Allen County Hospital	(316) 365-3131	Wichita State Univ.	(316) 689-3620
JUNCTION CITY		WINFIELD	
Geary County H.D.	(913) 762-5788	Cowley County H.D.	(316) 221-1430



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**Maur Hill
Prep School**
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**Academy of Mount
St. Scholastica**
(913) 367-1334

Atchison, Kansas 66002

EXTRA COPIES

Additional copies of this directory are available. Why not keep one near every phone in your office?

To order, write or call Donna Decker at:

Kansas Medical Society
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Topeka, KS 66612

913-235-2383, or
800-332-0156

The price for members is \$15.79 each; \$36.84 each for non-members. These prices include sales tax. There is no additional charge for shipping.

How to Contact Your Legislators

U.S. CONGRESSIONAL DELEGATION

Senators:

Robert Dole, 141 Hart Senate Office Bldg.,
20510, (202) 224-6521

Nancy L. Kassebaum, 302 Russell Senate Office
Bldg., 20510, (202) 224-4774

Representatives:

Dan Glickman, 1212 Longworth House Office
Bldg., 20515, (202) 225-6216

Jan Meyers, 315 Cannon House Office Bldg.,
20515, (202) 225-2865

Pat Roberts, 1323 Longworth House Office
Bldg., 20515, (202) 225-2715

Jim Slattery, 1440 Longworth House Office
Bldg., 20515, (202) 225-6601

Robert Whittaker, 2436 Rayburn House Office
Bldg., 20515, (202) 225-3911

When writing, the following form is appropriate:

Senators:

The Honorable John Doe
United States Senate
Address

Representatives:

The Honorable John Doe
House of Representatives
Address

Dear Senator Doe:

Dear Mr. Doe

THE PRESIDENT

The White House
1600 Pennsylvania Ave., N.W.
Washington, D.C. 20500
(202) 456-1414

KANSAS LEGISLATURE

To write state Senators and Representatives, the following addresses may be used:

Senators:

The Honorable John Doe
Senate Chambers
State Capitol Bldg.
Topeka, KS 66612

Representatives:

The Honorable John Doe
House of Representatives
State Capitol Bldg.
Topeka, KS 66612

Dear Senator Doe:

Dear Representative Doe:

Phone (913) 296-7300

Phone: (913) 296-7500

THE GOVERNOR

The Honorable Mike Hayden
State Capitol Bldg.
Topeka, KS 66612
(913) 296-3232

Medical Specialty Codes

The medical specialties used in this directory are self-designated. Thus, they do not necessarily indicate certification by the board of the specialty indicated, nor are they indication of accreditation by the Accreditation Council for Graduate Medical Education.

The codes utilized are derived from the AMA Masterfile Codes for Self-Designation of Practice Specialties, as prepared by the Division of Survey and Data Resources, American Medical Association, March 1990.

A	Allergy	NM	Nuclear Medicine
ADL	Adolescent Medicine	NOTO	Neuro-otology
ADM	Administrative Medicine	NR	Nuclear Radiology
ADT	Addictionology	NS	Neurological Surgery
AM	Aviation Medicine	OBG	Obstetrics and Gynecology
AN	Anesthesiology	OM	Occupational Medicine
BLB	Pathology — Bloodbanking	ON	Oncology
CD	Cardiovascular Disease	OPH	Ophthalmology
CDS	Cardiovascular Surgery	ORS	Orthopedic Surgery
CDTS	Cardiovascular & Thoracic Surgery	OTO	Otorhinolaryngology
CHP	Child Psychiatry	P	Psychiatry
D	Dermatology	PA	Clinical Pharmacology
DR	Radiology, Diagnostic	PATH	Pathology
EENT	Eye, Ear, Nose and Throat	PD	Pediatrics
EM	Emergency Medicine	PDA	Pediatric Allergy
END	Endocrinology	PDC	Pediatric Cardiology
ENT	Ear, Nose Throat	PDE	Pediatric Endocrinology
ES	Endoscopy Surgery	PDN	Pediatric Neurology
FP	Family Practice	PNP	Pediatric Nephrology
GE	Gastroenterology	PDO	Pediatric Ophthalmology
GP	General Practice	PDS	Pediatric Surgery
GPM	General Preventive Medicine	PGER	Psychogerontology
GPVS	General & Peripheral Vascular Surgery	PH	Public Health
GS	General Surgery	PM	Physical Medicine & Rehabilitation
GYN	Gynecology	PS	Plastic Surgery
HEM	Hematology	PUD	Pulmonary Disease
ID	Infectious Diseases	R	Radiology
IE	Insurance Examination	RHU	Rheumatology
IM	Internal Medicine	RO	Radiology/Oncology
MFM	Maternal Fetal Medicine	SON	Surgical Oncology
N	Neurology	TR	Therapeutic Radiation
NEM	Neonatal-Perinatal Medicine	TS	Thoracic Surgery
NEP	Nephrology	U	Urology
		00	Retired

Medical School Codes

UNITED STATES

- | | |
|---|--|
| 0102 University of Alabama School of Medicine, Birmingham | 2802 Washington University School of Medicine, St. Louis |
| 0301 University of Arizona College of Medicine, Tucson | 2803 University of Missouri School of Medicine, Columbia |
| 0401 University of Arkansas School of Medicine, Little Rock | 2820 University Medical College of Kansas City |
| 0502 University of California School of Medicine, San Francisco | 2822 Ensworth Medical College, St. Joseph |
| 0506 University of Southern California School of Medicine, Los Angeles | 2834 St. Louis University School of Medicine, St. Louis |
| 0511 Stanford University School of Medicine, Palo Alto | 2843 Kansas City College of Medicine and Surgery |
| 0512 Loma Linda University School of Medicine, Loma Linda — Los Angeles | 2846 University of Missouri School of Medicine, Kansas City |
| 0514 University of California School of Medicine, Los Angeles | 2878 Kansas City College of Osteopathy & Surgery |
| 0515 University of California College of Medicine, Irvine | 2879 Kirksville College of Osteopathic Medicine, Kirksville |
| 0702 University of Colorado School of Medicine, Denver | 3005 University of Nebraska College of Medicine, Omaha |
| 0801 Yale University School of Medicine, New Haven | 3006 Creighton University School of Medicine, Omaha |
| 0802 University of Connecticut, Farmington | 3007 Nebraska College of Medicine, Lincoln |
| 1001 George Washington University School of Medicine, Washington, D.C. | 3305 College of Medicine & Dentistry of New Jersey — New Jersey Medical School, Newark |
| 1002 Georgetown University School of Medicine, Washington, D.C. | 3401 University of New Mexico School of Medicine, Albuquerque |
| 1003 Howard University College of Medicine, Washington, D.C. | 3501 Columbia University College of Physicians and Surgeons, New York |
| 1102 University of Miami School of Medicine, Miami | 3503 Albany Medical College of Union University, Albany |
| 1103 University of Florida College of Medicine, Gainesville | 3506 State University of New York at Buffalo, School of Medicine, Buffalo |
| 1201 Medical College of Georgia, Augusta | 3508 State University of New York College of Medicine, Brooklyn |
| 1205 Emory University School of Medicine, Atlanta | 3509 New York Medical College, New York |
| 1601 Rush Medical College, Chicago | 3510 Bellevue Hospital Medical College, New York |
| 1602 University of Chicago Pritzker School of Medicine, Chicago | 3515 State University of New York College of Medicine, Syracuse |
| 1604 The Hahnemann Medical College and Hospital, Chicago | 3519 New York University School of Medicine, New York |
| 1606 Northwestern University Medical School, Chicago | 3520 Cornell University Medical College, New York |
| 1611 University of Illinois College of Medicine, Chicago | 3545 University of Rochester School of Medicine and Dentistry, Rochester |
| 1642 Chicago Medical School University of Health Sciences, Chicago | 3546 Albert Einstein College of Medicine of Yeshiva University, New York |
| 1643 Loyola University Stritch School of Medicine, Maywood | 3547 Mount Sinai School of Medicine of City University of New York, New York |
| 1645 Southern Illinois School of Medicine, Springfield | 3601 University of North Carolina School of Medicine, Chapel Hill |
| 1676 Chicago College of Osteopathic Medicine, Chicago | 3605 Bowman Gray School of Medicine, Winston-Salem |
| 1720 Indiana University School of Medicine, Indianapolis | 3607 Duke University School of Medicine, Durham |
| 1803 University of Iowa College of Medicine, Iowa City | 3737 University of North Dakota, Grand Forks |
| 1875 College of Osteopathic Medicine and Surgery, Des Moines | 3802 Eclectic Medical College, Cincinnati |
| 1902 University of Kansas School of Medicine, Kansas City | 3806 Case Western Reserve University School of Medicine, Cleveland |
| 2002 University of Louisville School of Medicine, Louisville | 3819 Toledo Medical College, Toledo |
| 2012 University of Kentucky College of Medicine, Lexington | 3840 Ohio State University College of Medicine, Columbus |
| 2101 Tulane University School of Medicine, New Orleans | 3841 University of Cincinnati College of Medicine, Cincinnati |
| 2105 Louisiana State University School of Medicine, New Orleans | 3843 Medical College of Ohio at Toledo, Toledo |
| 2106 Louisiana State University Medical Center, Shreveport School of Medicine, Shreveport | 3901 University of Oklahoma School of Medicine, Oklahoma City |
| 2201 Bowdoin Medical School, Brunswick-Portland | 3979 Oklahoma College of Osteopathic Medicine and Surgery, Tulsa |
| 2301 University of Maryland School of Medicine, Baltimore | 4002 University of Oregon Medical School, Portland |
| 2307 Johns Hopkins University School of Medicine, Baltimore | 4101 University of Pennsylvania School of Medicine, Philadelphia |
| 2401 Harvard Medical School, Boston | 4102 Jefferson Medical College of Thomas Jefferson University, Philadelphia |
| 2405 Boston University School of Medicine, Boston | 4107 Medical College of Pennsylvania, Philadelphia |
| 2407 Tufts University School of Medicine, Boston | 4109 Hahnemann Medical College and Hospital, Philadelphia |
| 2416 University of Massachusetts School of Medicine, Worcester | 4112 University of Pittsburgh School of Medicine, Pittsburgh |
| 2501 University of Michigan Medical School, Ann Arbor | 4113 Temple University School of Medicine, Philadelphia |
| 2507 Wayne State University School of Medicine, Detroit | 4114 Pennsylvania State University, Milton S. Hershey Medical Center, Hershey |
| 2512 Michigan State University College of Human Medicine, East Lansing | 4177 Philadelphia College of Osteopathic Medicine, Philadelphia |
| 2604 University of Minnesota Medical School, Minneapolis | 4201 University of Puerto Rico School of Medicine, San Juan |
| 2701 University of Mississippi School of Medicine, Jackson | 4301 Brown University Division of Biological and Medical Sciences, Providence |

- 4501 Medical University of South Carolina College of Medicine, Charleston
- 4705 Vanderbilt University School of Medicine, Nashville
- 4706 University of Tennessee College of Medicine, Memphis
- 4707 Meharry Medical College School of Medicine, Nashville
- 4720 East Tennessee State University School of Medicine, Johnson City
- 4802 University of Texas Medical Branch, Galveston
- 4804 Baylor College of Medicine, Houston
- 4812 University of Texas Southwestern Medical School, Dallas
- 4813 University of Texas Medical School, San Antonio
- 4814 University of Texas Medical School, Houston
- 4815 Texas Tech University School of Medicine, Lubbock
- 4816 Texas A&M University College of Medicine, College Station

- 4878 Texas College of Osteopathic Medicine, Ft. Worth
- 4901 University of Utah College of Medicine, Salt Lake City
- 5002 University of Vermont College of Medicine, Burlington
- 5101 University of Virginia School of Medicine, Charlottesville
- 5104 Medical College of Virginia Health Sciences Division of Virginia Commonwealth University, Richmond
- 5107 Eastern Virginia Medical School, Norfolk
- 5404 University of Washington School of Medicine, Seattle
- 5501 West Virginia University School of Medicine, Morgantown
- 5605 University of Wisconsin Medical School, Madison
- 5606 Medical College of Wisconsin, Milwaukee

FOREIGN MEDICAL SCHOOL CODES

CANADA

- 060 Alberta**
 - 06001 University of Alberta Faculty of Medicine, Edmonton
 - 06002 University of Calgary Faculty of Medicine, Calgary
- 061 British Columbia**
 - 06101 University of British Columbia Faculty of Medicine, Vancouver
- 062 Manitoba**
 - 06201 University of Manitoba Faculty of Medicine, Winnipeg
- 065 Ontario**
 - 06501 University of Toronto Faculty of Medicine, Toronto
 - 06505 Queen's University Faculty of Medicine, Kingston
 - 06506 University of Western Ontario Faculty of Medicine, London
- 067 Quebec**
 - 06701 McGill University Faculty of Medicine, Montreal

OTHER FOREIGN

- 118 Afghanistan**
 - 11801 Faculty of Medicine, Kabul University, Kabul
- 132 Argentina**
 - 13201 Facultad de Ciencias Medicas de la Universidad de Buenos Aires, Buenos Aires
 - 13202 Facultad de Ciencias Medicas de la Universidad Nacional de Cordoba, Cordoba
 - 13204 Facultad de Ciencias Medicas, Farmacia y Ramos Menores de la Universidad Nacional del Litoral, Rosario, Santa Fe
 - 13206 Facultad de Ciencias Medicas de la Universidad Nacional de Cuyo, Mendoza, Mendoza
- 143 Australia**
 - 14303 Faculty of Medicine University of Sydney, Sydney, New South Wales
- 154 Austria**
 - 15407 Medizinische Fakultät der Universität Wien, Wien (407-26 from March 13, 1938 to June, 1945)
- 160 Bangladesh**
 - 16002 Dacca Medical College, Ramna Dhaka, Bangladesh
- 165 Belgium**
 - 16501 Faculté de Médecine et de Pharmacie Université libre de Bruxelles, Bruxelles
 - 16504 Universitaire Katholieke de Louvain, Faculté de Médecine, Louvain
- 176 Bolivia**
 - 17602 Facultad de Ciencias Medicas de la Universidad Mayor Real y Pontificia de San Francisco Xavier de Chuquisaca, Sucre
 - 17603 Facultad de Medicina de la Universidad Mayor de San Simon, Cochabamba
- 187 Brazil**
 - 18708 Universidade Federal de Parana, Faculdade de Medicina, Curitiba, Parana

- 209 Burma**
 - 20901 Institute of Medicine I, Rangoon
- 215 Cambodia**
 - 21501 Ecole Royal de Medicine du Cambodge, Phnompenh
- 231 Chile**
 - 23101 Facultad de Medicina de la Universidad de Chile, Santiago
- 242 China**
 - 242 China (also see 243 Effective January 1, 1977)
 - 24209 St. John's University (Pennsylvania Medical School, Shanghai, Kiangsu) (Extinct)
 - 24216 National Shanghai Medical College, Shanghai, Kiangsu
 - 24217 West China Union University College of Medicine and Dentistry, Chengtu, Szechuan
 - 24222 Aurora University Faculty of Medicine, Shanghai, Kiangsu (Extinct)
 - 24239 Shansi University Medical College, Taiyuan, Shansi
- 243 China**
 - 24338 National Honan University Medical College, Kaifeng, Honan (24238 Prior to 1-17-1)
 - 24351 National Defense Medical Center, School of Medicine, Shanghai, Kiangsu (24251 Prior to 1-17-1)
- 244 Taiwan**
 - 244 Taiwan (Formosa) effective 1-17-1
 - 24402 College of Medicine National Taiwan University, Taipei (38502 Prior to 1-17-1)
 - 24404 Taipei Medical College, Taipei (38504 Prior to 11-71)
 - 24405 China Medical College, Taichung (38505 before 1971)
- 264 Colombia**
 - 26401 Facultad de Medicina de la Universidad Nacional de Colombia Ciudad Universitaria, Bogota, Cundinamarca
 - 26402 Facultad de Medicina de la Universidad de Cartagena, Cartagena, Bolivar
 - 26404 Facultad de Medicina de la Pontificia Universidad Javeriana, Bogota, Cundinamarca
 - 26406 Facultad de Medicina de la Universidad de Caldas, Manizales, Caldas
 - 26407 Facultad de Medicina de la Universidad del Cauca, Popayan, Cauca
- 275 Cuba**
 - 27501 Facultad de Medicina de la Universidad de la Habana, La Habana
 - 27502 Escuela de Medicina, Universidad de Oriente, Santiago
- 286 Czechoslovakia**
 - 28601 Deutsche Univerzita Medizinische Fakultät, Praha (15405 before 1919)
 - 28602 Charles Univerzita Fakultät of PedGen Medicine, Praha
- 308 Dominican Republic**
 - 30801 Facultad de Medicina de la Universidad de Santo Domingo, Ciudad, Trujillo
 - 30803 Universidad Central Del Este
 - 30805 Instituto Tecnológico de Santo Domingo, Santo Domingo
 - 30807 Universidad Cetec, Escuela De Medicina, Santo Domingo
- 319 Ecuador**
 - 31901 Facultad de Ciencias Medicas de la Universidad Central, Quito

330 Egypt (United Arab Republic)

- 33002 Kasr-el-Aini Faculty of Medicine, Cairo University, Cairo (Formerly Fouad First University Faculty of Medicine)
- 33003 Faculty of Medicine Alexandria University, Alexandria
- 33004 Abbasis Faculty of Medicine, University of Ein Shams, Cairo

341 El Salvador

- 34104 Facultad de Medicina Universidad Nacional del Salvador, San Salvador

352 England

- 35204 University of Newcastle-Upon-Tyne Medical School (Before August 1963 Kings College University in Durham)
- 35205 School of Medicine University of Leeds, Leeds
- 35207 University of London Faculty of Medicine, London
- 35211 Registrable Qualifications granted by English Conjoint Board (Royal College of Surgeons of England/Royal College of Physicians of London)

385 Formosa (Taiwan)

- 385 (Also see 244 Taiwan [Effective 1-17-1])
- 38501 Kaohsiung (takau) Medical College, Kaohsiung
- 38502 College of Medicine National Taiwan University, Taipei
- 38503 National Defense Medical Center, Taipei
- 38505 China Medical College, Taichung

396 France

- 39606 Faculte de Medecine de l'Universite de Paris, Paris, Seine
- 39607 Faculte mixte de Medecine et de Pharmacie de l'Universite de Toulouse, Toulouse, Haute-Garonne

407 Germany

- 407 (Also see 408409—East and West Germany [Effective 1-1-71])
- 40707 Medizinische Fakultät der Georg-August-Universität, Göttingen, Niedersachsen
- 40710 Medizinische Fakultät der Universität Heidelberg, Heidelberg, Baden-Württemberg
- 40715 Medizinische Fakultät der Philipps-Universität, Marburg/Lahn, Hessen
- 40716 Medizinische Fakultät der Ludwig Maximilians-Universität, München, Bayern
- 40721 Medizinische Fakultät der Universität Hamburg, Hamburg
- 40723 Medizinische Fakultät der Johann-Wolfgang-Goethe-Universität, Frankfurt-Am-Main, Hessen
- 40733 Medizinische Fakultät der Freien Universität Berlin, Berlin

409 Germany West

- 40902 Medizinische Fakultät Rheinischen Friedrich Wilhelms Universität, Bonn (40702 before 1971)
- 40905 Medizinische Fakultät Albert-Ludwigs-Universität Freiburg IM Breisgau
- 40921 Medizinische Fakultät Universität Hamburg, Hamburg (40721 before 1971)
- 40933 Medizinische Fakultät Freien Universität, Berlin, Berlin (40733 Prior to 1-1-71)

418 Greece

- 41801 Faculty of Medicine National University of Athens, Athens
- 41802 Faculty of Medicine University of Thessaloniki, Thessaloniki

429 Guatemala

- 42901 Facultad de Ciencias Medicas, Universidad de San Carlos, Guatemala

451 Honduras

- 45101 Facultad de Medicina y Cirugia de la Universidad Nacional Autónoma de Honduras, Tegucigalpa

473 Hungary

- 47301 Orvosi Fakultás Tudományegyetem, Budapest

495 India (Goa)

- 49501 University of Bombay, Affiliated Medical Colleges are:
 - a. Grant Medical College Bombay University, Bombay, Maharashtra
 - b. Seth Gorhandas Sunderdas Medical College Bombay University, Bombay, Maharashtra
- 49503 Guru Nanak Medical College, Guru Nanak University, Amritsar, Punjab
- 49504 Madras Medical College Madras University, Madras, Madras
- 49508 Christian Medical College Punjab University, Ludhiana, Punjab
- 49509 St. John's Medical College, Bangalore, Mysore (before June 1966: Government Medical College, Mysore University, Mysore)
- 49511 Andhra Medical College Andhra University, Visakhapatnam, Andhra

- 49515 Prince of Wales Medical College, Patiala University, Bankipore Patiala, Bihar
- 49516 Stanley Medical College Madras University, Madras, Madras
- 49517 Topiwala National Medical College, Bombay University, Bombay, Maharashtra
- 49518 Assam Medical College Gauhati University, Dibrugarh, Assam
- 49520 M.G.M. Medical College, Indore Madhya Pradesh
- 49521 Osmania Medical College Osmania University, Hyderabad, Andhra
- 49523 Medical College Baroda University, Baroda, Gujarat
- 49527 Christian Medical College, Vellore, Madras
- 49528 Byramjee Jeejeebhoy Medical College, Poona, Maharashtra
- 49529 Government Medical College Punjab University, Patiala, Punjab
- 49530 Sawai Man Singh Medical College Rajasthan University, Jaipur, Rajasthan
- 49531 Medical College Kerala University, Trivandrum, Kerala
- 49533 Medical College, Bangalore University, Mysore
- 49534 Gajra Rao Medical College Vikram University, Gwalior, Madhya Pradesh
- 49535 Karnatak Medical College Karnatak University, Hubli, Mysore
- 49536 All-India Institute of Medical Sciences, New Delhi, Delhi
- 49537 Kasturba Medical College Karnatak University, Manipal, Mysore
- 49541 G.S.V. Memorial Medical College Lucknow University, Kanpur, Uttar Pradesh
- 49547 Medical College Jabalpur University, Jabalpur, Madhya Pradesh
- 49548 M.P. Shah Medical College Gujarat University, Jamnagar, Gujarat
- 49549 Ghandhi Medical College Vikram University, Bhopal, Madhya Pradesh
- 49550 Guntur Medical College Andhra University, Guntur, Andhra
- 49552 St. John's Medical College, Bangalore University, Bangalore, Mysore
- 49554 Rajendra Medical College, Ranchi, Bihar
- 49555 Sardar Patel Medical College, Bikaner
- 49557 Kakatiya Medical College, Warangal, Andhra Pradesh
- 49568 College Medicine Sciences Banaras Hindu University, Varanasi, Uttar Pradesh
- 49573 Armed Forces Medical College, Poona
- 49574 Ravindra Nath Tagore Medical College, Udaipur
- 49576 Municipal Medical College, Gujarat University, Ahmedabad, Gujarat
- 49596 Lokmanya Tilak Mun Medical College, Bombay University, Bombay, Maharashtra
- 49597 Dr. Vaishampayan Memorial Medical College, Shivaji University, Shalapur, Maharashtra
- 49610 M.L.B. Medical College, Juansi

496 India

- 49611 Sri Krishna Medical College, Muzaffarpur, Bihar

506 Indonesia

- 50602 Faculty of Medicine Airlangga Airlangga University, Surabaya

517 Iran

- 51701 Faculty of Medicine University of Teheran, Teheran
- 51703 Faculty of Medicine, Tabriz

528 Iraq

- 52801 Faculty of Medicine Baghdad University, Baghdad

539 Ireland

- 53901 Faculty of Medicine Queen's University of Belfast, Belfast
- 53902 National University of Ireland, Constituent Colleges are:
 - a. Faculty of Medicine University College, Dublin
 - b. Faculty of Medicine University College, Cork
 - c. Faculty of Medicine, Galway

- 53903 School of Physic Trinity College University of Dublin, Dublin

550 Israel

- 55001 The Hebrew University-Hadassah Medical School, Jerusalem

561 Italy

- 56101 Facoltà di Medicina e Chirurgia dell'Università di Bologna, Bologna
- 56115 Facoltà di Medicina e Chirurgia dell'Università di Perugia, Perugia
- 56119 Facoltà di Medicina e Chirurgia dell'Università di Siena, Siena

572 Japan

- 57211 Tokyo Medical College (Nippon Ikadaigaku) Hongo, Tokyo (Extinct)
- 57241 Faculty of Medicine Shinshu University, Matsumoto, Nagano
- 57249 Tokyo Medical College, Tokyo

583 Korea (South)

- 58301 Severance Medical College Yonsei University, Seoul

- 58302 College of Medicine Seoul National University, Seoul
 58303 Korea University Medical College, Seoul
 58304 College of Medicine Kyong-Puk National University, Taegu
 58306 College of Medicine Chun Nam National University, Kwangju
 58309 College of Medicine Pusan National University, Pusan
 58310 College of Medicine Catholic University, Seoul
- 605 Lebanon**
 60501 Medical School American University of Beirut, Beirut
- 627 Malta**
 62701 Faculty of Medicine and Surgery Royal University of Malta, Valetta
- 649 Mexico**
 64901 Facultad de Medicina de la Universidad Nacional Autonoma de Mexico, Mexico
 64902 Facultad de Medicina de la Universidad de Nuevo Leon, Monterrey, Nuevo Leon
 64906 Facultad de Medicina de la Universidad Nacional del Sureste, Merida, Yucatan
 64914 Facultad de Medicina de la Universidad Autonoma de Guadalajara, Guadalajara, Jalisco
 64933 Universidad Autonoma de Ciudad Juarez, Ciudad Juarez, Chihuahua
 64936 Facultad de Estudios Universidad Xochicalo A.C., Cuernavaca, Morelos
- 660 Netherlands**
 66061 Faculteit der Geneeskunde Universiteit Van Amsterdam, Amsterdam
- 671 New Zealand**
 67101 Medical School University of Otago, Dunedin
- 704 Pakistan**
 70401 King Edward Medical College, Lahore, West Pakistan
 70402 Dow Medical College, Karachi, Federal Capital Area
 70403 Dacca Medical College, Dacca, East Pakistan
 70404 Nishtar Medical College, Multan, West Pakistan
 70409 Khyber Medical College, Peshawar, North-West Frontier Province
 70410 Chittagong Medical College, Chittagong, East Pakistan (16001 after 7-1-72)
- 726 Paraguay**
 72601 Facultad de Medicina de la Universidad Nacional de Asuncion, Asuncion
- 737 Peru**
 73701 Facultad de Medicina de San Fernando de la Universidad Nacional Mayor de San Marcos, Lima
 73705 Facultad de Medicina de la Universidad Nacional de San Agustin, Arequipa
 73706 Facultad de Medicina "Cayetano Heredia" de la Universidad Peruana de Ciencias Medicas y Biologicas, Lima
- 748 Phillipines**
 74801 Faculty of Medicine and Surgery University of Santo Tomas, Manila
 74802 College of Medicine University of the Phillipines, Manila
 74807 College of Medicine Manila Central University, Manila
 74808 Institute of Medicine Far Eastern University, Manila
 74809 College of Medicine Southwestern University, Cebu City
- 74810 College of Medicine University of the East, Quezon City
 74811 College of Medicine Cebu Institute of Technology, Cebu City
- 759 Poland**
 75903 Warsaw Medical Academy
 75911 Akademia Medyczna, Bialystock
- 803 Scotland**
 80301 Faculty of Medicine University of Aberdeen, Aberdeen
 80302 University of St. Andrews School of Medicine, Dundee
 80303 Faculty of Medicine University of Edinburgh, Edinburgh
 80305 Faculty of Medicine University of Glasgow, Glasgow
- 836 South Africa**
 83601 Medical School University of the Witwatersrand, Johannesburg
- 847 Spain**
 84701 Facultad de Medicina de la Universidad de Barcelona, Barcelona
 84703 Facultad de Medicina de la Universidad de Grenada, Grenada
 84704 Facultad de Medicina de la Universidad de Madrid, Madrid
 84706 Facultad de Medicina de la Universidad de Zaragoza, Zaragoza
 84708 Facultad de Medicina de la Universidad de Valencia, Valencia
 84710 Facultad de Medicina de la Universidad de Salamanca, Salamanca
 84711 Facultad de Medicina de la Universidad Catolica Navarra, Pamplona
- 869 Switzerland**
 86901 Medizinische Fakultät der Universität Basel, Basel
 86902 Medizinische Fakultät der Universität Bern, Bern
 86905 Faculté de Médecine de l'Université de Lausanne, Lausanne
- 875 Syria**
 87501 Faculty of Medicine Damascus University, Damascus
- Taiwan (See Formosa)**
- 891 Thailand**
 89101 Faculty of Medicine at Chulalongkorn Hospital University of Medical Sciences, Bangkok
 89102 Faculty of Medicine at Sariraj Hospital University of Medical Sciences, Thonburi
 89104 Faculty of Medicine at Ramathibodi Hospital, Mahidol University, Bangkok
- 902 Turkey**
 90201 Tıp Fakültesi İstanbul Üniversitesi, İstanbul
 90205 Hacettepe University Faculty of Medicine, Ankara
- 913 Union of Soviet Socialist Republics**
 91302 Voronezh Medical Institute, Voronezh
- 917 United Kingdom-England-Wales**
 91707 University of London Faculty of Medicine, London (35207 before 1971)
- 941 Viet-Nam South**
 94101 Faculté mixte de Médecine et de Pharmacie Université de Saïgon, Saïgon
- 945 Udaipur**
 94574 Ravindra Nath Tagore Medical College, Udaipur
- 957 Yugoslavia**
 95702 Medicinski Fakultet Univerzitet u Beogradu, Beograd

Kansas AIDS Information Hot Line

1-800-232-0040

A recorded message updated continually by
 the Kansas Department of Health and Environment.

Alphabetical Listing

NOTE: Out-of-state members are listed alphabetically but not in the city listings. For addresses of out-of-state members, call the KMS office, 1-800-332-0156.

A

ABAY MD,EUSTAQUID O, WICHITA
ABBAS MD,DILAWER H, WICHITA
ABBOTT D O,GREGORY A, SALINA
ABBUEHL MD,DDN R, CHANUTE
ADAMS JR MD,MARCUS W, HUTCHINSON
ADAMS MD,DWIGHT, DSAGE CITY
AGUSTIN MD,CDNRADO M, WICHITA
AHLSTRAND MD,RICHARD A, WICHITA
AHMAO MD,ABDU Q, EL DDRADD
AHMED MD,IFTEKHAR, KANSAS CITY,MO
AHUJA,KIRAN S, SHAWNEE MISSION
AILLON MD,ALEJANDRO J, HALSTEAD
AKERS MD,GUY I, FORT SCOTT
ALBERS MD,ROBERT C, HAYS
ALBRIGHT MD,JEROLD D, HUTCHINSON
ALDIS MD,HENRY, FORT SCOTT
ALDIS MD,WILLIAM, FORT SCOTT
ALDOROTY MD,NEIL, WICHITA
ALEXANDER JR MD,L GEORGE, KANSAS CITY
ALEXANDER MD,CHARLES E, KANSAS CITY
ALFONSD MD,MANUEL, WICHITA
ALGIE MD,WILLIAM H, KANSAS CITY
ALLBRITTEN JR MD,FRANK F, CUNNINGHAM
ALLEGRE MD,ANN, KANSAS CITY
ALLEN EXEC DIR , DWIGHT, WICHITA
ALLEN JR MD,WILLIAM R, KANSAS CITY
ALLEN MD,FRANCES A, NEWTON
ALLEN MD,JAMES V, SHAWNEE MISSION
ALLEN MD,MARK L, SHAWNEE MISSION
ALLEN MD,MAX S, SHAWNEE MISSION
ALLEN MD,PHILLIP M, WICHITA
ALLEN MD,RAY E, LIBERAL
ALLEN MD,TIMOTHY E, TOPEKA
ALLEN SR MD,WILLIAM R, KANSAS CITY
ALLEY-HAY MD,RD,BYN, WICHITA
ALLIN MD,DENNIS M, SHAWNEE MISSION
ALLMAN,LORI R, SHAWNEE MISSION
ALMONTE MD,PRISCILLA C, WICHITA
ALMONTE MD,RDOLFO D, WICHITA
ALQUIST MD,VERLY D, BAXTER SPRINGS
ALSO MD,WILLIAM R, SALINA
ALTENBERND MD,ELVIN C, SHAWNEE MISSION
ALTER MD,BRUCE R, ST FRANCIS
ALVAREZ MD,NDRBERTO, ARKANSAS CITY
AMADD MD,MERCEDES C, SHAWNEE MISSION
AMAWI MD,MDHAMMAD S, DODGE CITY
AMBLER MD,CARL D, PRATT
AMEND MD,DOUGLAS J, EMPORIA
AMIRANI,HDSEIN, WICHITA
AMMAR MD,ALEX D, WICHITA
AMSTUTZ MD,SAMUEL W, WICHITA
ANDERSEN MD,ANITA M, WICHITA
ANDERSON MD, EUGENE G, GREEN VALLEY,AZ
ANDERSON MD,DALE W, AUGUSTA
ANDERSON MD,DAVID J, WICHITA
ANDERSON MD,JAMES D, WICHITA
ANDERSON MD,JODY, SALINA
ANDERSON MD,LARRY R, WELLINGTON
ANDERSON MD,LYLE B, BLODMINGTON,IN
ANDERSON MD,WILLIAM A, SHAWNEE MISSION
ANDERSON MD,WINSTAN L, SUN CITY WEST,AZ
ANDERSON,DEBRAH A, KANSAS CITY
ANTRIM MD,PHILIP JENIFER, ANTHONY
APPENFELLER MD,WILLIAM O, OSAWATOMIE
APPEGATE JR MD,FRANCIS R, HAYS
ARAKAWA MD,KASUMI, KANSAS CITY
ARGD MD,DDNALD, MARYSVILLE
ARGD,TANYA, SHAWNEE MISSION
ARJUNAN MD, K N, TOPEKA
ARMBRUSTER MD,ALBERT A, STILLWELL
ARSTRONG MD,HARDLD J, PITTSBURG
ARNSPIGER II MD,RICHARD C, DLATHE
ARROYO MD,ZEFERIND, GARDEN CITY
ARTZ MD,TYRONE D, WICHITA
ARTZER MD,DENNIS C, TOPEKA
ARUNAKUL MD,PUNYA, TOPEKA
ARYANPUR,DAVID, KANSAS CITY
ASHER MD,MARC A, KANSAS CITY
ASHLEY JR MD,B JOHN, TOPEKA
ASHLEY MD,BYRD J, TOPEKA
ASHLEY MD,SAMUEL G, CHANUTE
ASHLEY MD,THOMAS J, TOPEKA
ATHON MD,MERRILL D, SHAWNEE MISSION
ATKIN MD,J D, YATES CENTER
ATKISSON MD,KOWLSKI MD,DEBRA, TOPEKA
ATWOOD D.O.,ERIC B, TOPEKA
ATWOOD MD,LARRY C, INDEPENDENCE
ATWOOD MD,M DALE, KINSLEY
ATWOOD MD,MICHAEL D., TOPEKA
AUCAR MD,ALFREDO, ARKANSAS CITY
AUNINS MD,JOHN, WICHITA
AUSTENFELD MD,JENNIFER, SHAWNEE MISSION
AUSTENFELD MD,MARK S, KANSAS CITY
AUSTIN,CRAIG T, SHAWNEE MISSION
AVERILL MD,STUART C, TOPEKA
AVES MD,AGNES, PARSONS
AVES MD,RENATO B, PARSONS
AYUTHIA MD,ISSARA I, DODGE CITY

B

BABEL,DDUGLAS B, KANSAS CITY
BACKES MD,DAVID J, WICHITA
BACDN MD,ARTHUR H, LAKE WORTH,FL
BADEEN II MD, LOUIS JOHN, SHAWNEE MISSION
BAEHR MD,RALPH H, TOPEKA
BAEKE MD,JOHN D, SHAWNEE MISSION
BAILEY MD,WILLIAM A, LAWRENCE
BAIR MD,ALBERT E, INDEPENDENCE
BAIR MD,GLENN O, TOPEKA
BAJAJ MD,ASHDK K, WICHITA
BAKER MD,GARY L, KANSAS CITY
BAKER MD,MICHAEL P, DANVILLE,PA
BAKER MD,PHILLIP L, TOPEKA
BAKER MD,RAY D, TOPEKA
BAKER MD,RICHARD B, MANHATTAN
BAKER MD,WILLIAM STEVEN, SHAWNEE MISSION
BAKER,TRACY M, KANSAS CITY
BALANOFF MD,ARNOLD Z, SHAWNEE MISSION
BALDWIN MD,THOMAS F, SHAWNEE MISSION
BAMBARA MD,JOHN F, MANHATTAN
BAMBINI,DANIEL A, SHAWNEE MISSION
BAMMEL MD,BRUCE, WICHITA
BANKS MD,DDNALD E, SHAWNEE MISSION
BANKS MD,ROBERT E, PAOLA
BANSAL MD,ROOPA D, SHAWNEE MISSION
BANSAL MD,SATISH C, SHAWNEE MISSION
BANTRUP,GREGORY W, WICHITA
BANWART,JOHN C, SHAWNEE MISSION
BAPTIST MD,JEREMY E, SHAWNEE MISSION
BARABAN MD,MARC R, TOPEKA
BARBA JR MD,ANTONID P, WICHITA
BARBA MD,ESTRELLA G, WICHITA
BARBER MD,JAMES L, AUGUSTA
BARBERA MD,PORTER E, INDEPENDENCE
BARCLAY MD,ANDREW M, WICHITA
BARE II MD,CHARLES E, SHAWNEE MISSION
BARELLI MD,PAT A, KANSAS CITY,MO
BARKER MD,BENJAMIN H, WICHITA
BARKER MD,ELIZABETH B, SHAWNEE MISSION
BARKER MD,PATRICK N, PRATT
BARKER MD,PATSY, WICHITA
BARKER MD,STANTON L, HUTCHINSON
BARKER MD,STEVEN E, MINNEAPOLIS
BARLOW MD,JOHN M, MANHATTAN
BARNES MD,JDE L, SMITH CENTER
BARNES MD,MARIAN, PORT CHARLOTTE,FL
BARNETT JR MD,THOMAS E, SHAWNEE MISSION
BARNETT MD,JAMES A, EMPORIA
BARNETT MD,ROBERT E, TOPEKA
BARNHART MD,RONALD J, SHAWNEE MISSION
BARR MD,RICHARD N, SHAWNEE MISSION
BARRETT MD,BRADLEY H, NEODESHA
BARRICK MD,BRUCE, SHAWNEE MISSION
BARRY MD,DAVID R, TOPEKA
BARTAL MD,ELY, WICHITA
BARTH III MD,CHARLES W, WICHITA
BASCOM MD,GEORGE S, MANHATTAN
BASHAM MD,BRIAN E, WICHITA
BASHAM MD,JAMES J, FORT SCOTT
BASINGER MD,BRADLEY B, WICHITA
BASS II MD,ORAL E, WICHITA
BASSETT MD,PAUL M, TOPEKA
BATES MD,MICHAEL D, WICHITA
BATES MD,MICHAEL N, NEWTON
BATNITZKY MD,SOLDON, KANSAS CITY
BATTISTE MD,CYNTHIA, WICHITA
BATTY MD,LARRY H, SHAWNEE MISSION
BAUER MD,JOSEPH G, GRANO RAPIDS,MI
BAUER MD,LAKE W, SHAWNEE MISSION
BAUER MD,LAIRD A, SHAWNEE MISSION
BAUER MD,MARTIN L, HOMEWOOD,AL
BAUER MD,RICHARD D, HAYS
BAUER MD,THOMAS A, HUTCHINSON
BAUGH MD,REGINALD F, KANSAS CITY
BAUGHMAN MD,MICHAEL J, GARDEN CITY
BAUM MD,CURTIS A, TOPEKA
BAUMAN MD,M LEON, WICHITA
BAUMANN MD,PAUL A, WICHITA
BAXTER MD,KIRKMAN G, KANSAS CITY
BAXTER MD,W REESE, SALINA
BAYLES MD,HUGH G, FREDONIA
BEACH MD,RICHARD R, LAWRENCE
BEAHM MD,DDNALD E, GREAT BEND
BEAL MD,RAYMOND J, BUFFALO
BEALE MD,DAVID A, TOPEKA
BEAMER MD,R LARRY, WICHITA
BEARD MD,MELISSA J, TOPEKA
BEATTIE MD,MARY A, WICHITA
BEBAK MD,DDNALD M, WICHITA
BEBER MD, JORGE H., WICHITA
BECK JR MD,CALVIN E, WICHITA
BECK MD,CHARLES W, WICHITA
BECK MD,JOSEPH D, TOPEKA
BECK MD,WILLIAM R, NEWTON
BECKER MD,KARL E, WICHITA
BECKER MD,LESLIE E, KANSAS CITY
BECKER MD,NANCY J, SHAWNEE MISSION
BEDFORD MD,D R, TOPEKA
BEECH MD,RANDALL R, WICHITA
BEEHMAN MD,FLDYD C, TOPEKA
BEEZLEY MD,MICHAEL J, SHAWNEE MISSION

BEGGS MD,DAVID F, GARDEN CITY
BEGGS,DANIEL A, SHAWNEE MISSION
BEILMAN MD,GREG, WICHITA
BELL MD,D W, SHAWNEE MISSION
BELL MD,MARK G, SALINA
BELLER MD,WILLIS L, TOPEKA
BELLDWS-BLAKELY MD,DAVID S, TOPEKA
BELDT JR MD,MONTI L, LAWRENCE
BELT MD,ROBERT J, SHAWNEE MISSION
BELZER MD,EDWARD G, SHAWNEE MISSION
BENA MD,JAMES, PITTSBURG
BENAGE MD,JOHN F, FORT SCOTT
BENJAMIN,ASHLEY B, LAWRENCE
BENNING MD,TIMOTHY C, WICHITA
BENSON MD,KIRK T, KANSAS CITY
BERGH MD,JAMES R, KANSAS CITY,MO
BERGIN MD,JAMES J, KANSAS CITY
BERKEY MD,VERNON A, PITTSBURG
BERKLEY MD,DON H, ABILENE
BERKLEY MD,NORMAN W, SENECA
BERNARD MD,JOHN H, EMPORIA
BERNHARDT MD,MARK, SHAWNEE MISSION
BETHEL MD,CHANDLER S, WICHITA
BEUGELSDIJK MD,HENRY PETER, HALSTEAD
BEY,LODIE D, KANSAS CITY,MO
BHARATI MD,RALPH, WICHITA
BHARGAVA MD,ASHDK KUMAR, LA CROSSE
BHARGAVA MD,BAIKUNTH N, WINFIELD
BHARGAVA MD,SHOBHANA, LA CROSSE
BICHLMEIER MD,FRANKLIN G, SHAWNEE MISSION
BIERLEIN MD,KENNETH J, PITTSBURG
BIERMANN MD,HENRY J, WICHITA
BIGGS MD,J DENNIS, ABILENE
BIGLER MD,F CALVIN, GARDEN CITY
BIGONGIARI MD,LAWRENCE R, WICHITA
BIKALES MD,VICTOR WILLIAM, SHAWNEE MISSION
BILLINGS,BRIAN M, KANSAS CITY
BILLINGSLEY JR MD,JOHN A, OSAWATOMIE
BILLINGSLEY MD,THAD H, SHAWNEE MISSION
BINGAMAN MD,ROBERT W, WICHITA
BINYON MD,KERNIE W, WICHITA
BISE MD,RDGER N, KANSAS CITY
BISHOP MD,FRANCIS E, SHAWNEE MISSION
BISHOP MD,HENRY R, SHAWNEE MISSION
BISHOP MD,RODNEY LEE, LAWRENCE
BITTER,CINCY C, KANSAS CITY
BLACK MD,BRYAN L, WICHITA
BLACK MD,CYRIL V, PRATT
BLACKBURN MD,ROBERT W, COUNCIL GROVE
BLACKMAN MD,JACQUES D, WICHITA
BLAKE,KATHLEEN M, KANSAS CITY
BLANK MD,JOHN N, HUTCHINSON
BLEIBERG MD,EFRAIN, TOPEKA
BLETZ MD,DDNALD B, SHAWNEE MISSION
BLOCK MD,JEROME E, CFFEYVILLE
BLOMQUIST MD,GLENDA L H, SALINA
BLDOM MD,BARRY THEIL, WICHITA
BLOOM MD,L THEIL, PRATT
BLDOM MD,RODNEY LAMONT, WICHITA
BLOXHAM MD,THOMAS J, WICHITA
BLUMBERG MD,LAWRENCE B, GARDEN CITY
BLUMER MD,JOHN R, IOWA CITY,IA
BOCK MD,PETER A, EUDDRA
BOESE MD,KENNETH M, MANHATTAN
BOGNER MD,PAUL F, NEWTON
BOLES MD,J MICHAEL, SHAWNEE MISSION
BOLES MD,R DALE, COMANCHE,OK
BOLLINGER MD,ROBERT E, KANSAS CITY
BOLLMAN MD,CHARLES S, JUNCTION CITY
BOLT MD,MICHAEL, TOPEKA
BOLT MD,MICHAEL S, WICHITA
BOND MD,RDGER C, WICHITA
BONBRAKE MD,C RICHARD, TOPEKA
BOREL MD,DAVID, TOPEKA
BORGENDALE MD,LLEWELLYN V, WAMEGO
BORRA MD,MARIO J, HUTCHINSON
BORROR,CHERYL, WICHITA
BOS MD,NORMAN C, HUTCHINSON
BOSILEVAC MD,FRED N, KANSAS CITY
BOSILEVAC JR MD,JOSEPH E, EMPORIA
BOSSE MD,FRANK K, ATCHISON
BOSSEMEYER II MD,CHARLES H, SALINA
BOTTS MD, LARRY D, SHAWNEE MISSION
BOUREAUX MD,VELTIN J, WICHITA
BOWEN JR MD,HARRY J, TOPEKA
BOWEN MD,CLOVIS W, TOPEKA
BOWEN MD,JUDITH M, TOPEKA
BOWERMAN MD,ROBERT F, HAYS
BOWLES MD,MARK H, WICHITA
BOXBERGER MD,GREGORY R, WICHITA
BOXER MD,GARY, MANHATTAN
BOYCE,MARY C, WICHITA
BOYD MD,HARDLD D, CANTONMENT,FL
BOYD MD,Z REX, WICHITA
BOYDEN MD,MARY S, LAWRENCE
BOYER MD,DEBRAH A, TOPEKA
BRACKETT JR MD,CHARLES E, KANSAS CITY
BRADA MD,DDNALD ROBERT, WICHITA
BRADEN MD,BILL L, WAMEGO
BRADLEY MD,FENWICK P, LIBERAL
BRADLEY MD,H RUSSELL, EMPORIA
BRADLEY MD,J RODERICK, GREENSBURG
BRADLEY MD,JOHN G, WICHITA
BRADLEY,KENT R, WICHITA
BRADY,MARK D, WICHITA
BRAHMAN MD,HERBERT D, TOPEKA
BRAKE MD,DAVID, WICHITA

*Probationary members.

BRAMBLE MD,JANA D, KANSAS CITY,MO
 BRANDSTED MD,ERNEST C, MCPHERSON
 BRANIECKI MD,MARYLEE A, KANSAS CITY
 BRANSON MD,VERNON L, LAWRENCE
 BRAUN III MD,WILLIAM T, WICHITA
 BRAUN MD,EDWARD W, FORT SCOTT
 BRAUN MD,KENNETH, WICHITA
 BRAUN MD,ROBERT W, TOPEKA
 BRAUN MD,THOMAS G, WICHITA
 BRAUN MD,WILLIAM T, PDRT DRANGE,FL
 BRAY MD,AVIS PAGE, CONCORDIA
 BRECHEISEN,NANCY L, KANSAS CITY
 BRECKBILL MD,DAVID L, WICHITA
 BRETHDUR MD,LESLIE J, JUNCTION CITY
 BREWER MD,MARSHALL A, ULYSSES
 BREWER,SUSAN J, KANSAS CITY
 BRIAN MD,DAVID A, DDOGE CITY
 BRIAN MD,ROBERT M, EL DORADD
 BRIDGENS MD,JAMES G, KANSAS CITY,MO
 BRIDWELL MD,RUSSELL E, TOPEKA
 BRILLHART MD,MAXINE T, KANSAS CITY
 BRINTON MD,E HOLMES, WICHITA
 BRINTON MD,EDWARD S, WICHITA
 BRITTAN,ANDREW M, SHAWNEE MISSION
 BROCKHOUSE MD,JOHN P, EMPORIA
 BRODSKY MD,TRINA A, TOPEKA
 BROOKER MD,ROBERT M, LA MESA,CA
 BROOKS MD,CHARLES L, KANSAS CITY
 BROOKS MD,WILLIAM HENRY, KANSAS CITY
 BROOKS,PAUL, KANSAS CITY
 BROSIUS MD,FRANK C, WICHITA
 BROWN JR MD,VAL J, WICHITA
 BROWN MD,C EVERETT, STAFFORD
 BROWN MD,C REIFF, GREAT BEND
 BROWN MD,DAVID J, WICHITA
 BROWN MD,FRED E, ST MARYS
 BROWN MD,JEFFERY C, WICHITA
 BROWN MD,MICHAEL P, WICHITA
 BROWN MD,ROBERT L, WICHITA
 BROWN MD,ROBERT D, AUBURN,AL
 BROWN MD,ROBERT WAYNE, SALINA
 BROWN MD,RONALD C, WICHITA
 BROWN MD,RONALD L, WICHITA
 BROWN MD,TODD A, WICHITA
 BROWN MD,VAL J, WICHITA
 BROWN MD,WILLIAM R, SHAWNEE MISSION
 BROWN-SANDERS MD,CARDLINE, LEES SUMMIT,MO
 BROWNING MD,JIMMIE L, CLAY CENTER
 BROWNING MD,WILLIAM H, WICHITA
 BROXTERMAN MD,STEVEN JOSEPH, SHAWNEE MISSION
 BROZEK MD,JEFFREY E, GREAT BEND
 BRUMMETT MD,RICHARD R, SHAWNEE MISSION
 BRUN MD,MICHAEL E, SHAWNEE MISSION
 BRUNER JR MD,KENNETH W, TOPEKA
 BRUNFELDT MD,JUAN KRAUS, LAWRENCE
 BRUNGARDT MD,BERNARD A, SALINA
 BRUNGARDT MD,GERARD S, WICHITA
 BRUNING MD,DANIEL L, SHAWNEE MISSION
 BRUNING MD,ROGER MARION, SHAWNEE MISSION
 BRUNNER,CHRIS N, WICHITA
 BRUND MD,JAMES W, GARDEN CITY
 BRYAN MD,EMERY C, ERIE
 BRYAN MD,PHILIP C, LIBERAL
 BRYANT MD,R KEVIN, WICHITA
 BUBB MD,STEPHEN K, SHAWNEE MISSION
 BUBECK MD,RALPH W, WICHITA
 BUCK JR MD,BEN H, WICHITA
 BUCK JR MD,HENRY W, LAWRENCE
 BUCK JR MD,WILLIAM D, BLUE RAPIDS
 BUCKMAN MD,MARTIN SPALDING, SHAWNEE MISSION
 BUDETTI MD,JOSEPH A, N MIAMI BEACH,FL
 BULA MD,RALPH E, HAYS
 BULLER MD,DAVID L, MCPHERSON
 BURCH,CINDY M, SHAWNEE MISSION
 BURGER MD,PAUL B, SHAWNEE MISSION
 BURGER MD,WILLIAM E, BASEHOR
 BURGESSON MD,FRANK G, EMPORIA
 BURGESS MD,ARTHUR P, DSWEGD
 BURGETT,PAUL M, KANSAS CITY
 BURKE MD,JAMES J, FORT SCOTT
 BURKE MD,JOSEPH V, ATCHISON
 BURKE MD,MICHAEL J, WICHITA
 BURKET JR MD,GEORGE E, KINGMAN
 BURKMAN MD,REUBEN J, CHANUTE
 BURNETT MD,LARRY E, SALINA
 BURNETT MD,A DEAN, HALSTEAD
 BURNEY II MD,WILLIAM W, WICHITA
 BURNEY MD,WILLIAM W, WICHITA
 BURNS,LISA A, SHAWNEE MISSION
 BURPEE MD,JAMES F, WICHITA
 BURT MD,RONALD J, DNAGA
 BUSER MD,WILLIAM D, SHAWNEE MISSION
 BUSHELL,KRISTEN, KANSAS CITY
 BUSTDS MD,JONAS G, HERINGTON
 BUTCHER MD,THOMAS P, EMPORIA
 BUTH MD,DENNIS K, WICHITA
 BUTIN MD,J WALKER, WICHITA
 BUTLER MD,DDRIS C, WICHITA
 BUTRICK MD,CHARLES W, SHAWNEE MISSION
 BUTT MD,MUHAMMED, CLAY CENTER
 BYERS MD,JOHN L, SALINA
 BYRNE MD,JAMES PERRY, WICHITA
 BYRNES MD,JOHN J, DLTATHE

C

CABRERA MD,ALBERT, MCPHERSON
 CACHIA MD,RICHARD M, TOPEKA
 CAEDD MD,CARMELITA D, LIBERAL
 CALBECK MD,JOHN, GARDEN CITY
 CALDERON MD,JAIME, KANSAS CITY
 CALIENDO JR MD,DANIEL J, WICHITA
 CALKINS MD,JOHN W, KANSAS CITY
 CALKINS MD,LARRY L, SHAWNEE MISSION
 CALLAGHAN,EDWARD J, KANSAS CITY
 CAMERON MD,WILLIAM J, KANSAS CITY
 CAMERON,JEFF W, KANSAS CITY
 CAMPBELL JR MD,WILLIAM R, FORT SCOTT
 CAMPBELL MD,EDWARD G, EMPORIA
 CAMPBELL MD,GARLAND L, ARKANSAS CITY
 CAMPBELL MD,WILLIAM H, COFFEYVILLE
 CAMPBELL,ELIZABETH A, SHAWNEE MISSION
 CAMPION MD,MARY K, WICHITA
 CANDELA MD,ANDRES, WICHITA
 CANADAY MD,JOHN J, SALINA
 CANNATA MD,GENE, GREENSBURG
 CANNON MD,MICHAEL W, WICHITA
 CANTWELL MD,MICHAEL L, COFFEYVILLE
 CAPPER MD,STANLEY L, WICHITA
 CAREY MD,LARRY J, PARSONS
 CARLILE MD,WILLIAM E, WICHITA
 CARLSON MD,EARL V, HAYS
 CARLSON MD,TERRY S, WICHITA
 CARLSSON MD, E R, MCPHERSON
 CARNEY MD,LISA A, SHAWNEE MISSION
 CARPENTER MD,PAUL R, KANSAS CITY
 CARPER MD,IVAN H, NEWTON
 CARPER MD,NICHOLAS P, SAN ANTONIO,TX
 CARPER MD,DWEN E, NEWTON
 CARPINO,STEPHANIE J, SHAWNEE MISSION
 CARR MD,SUSAN L, WICHITA
 CARREAU MD,ERNEST P, CEDAREDDGE,CO
 CARRO MD,ALBERT F, WICHITA
 CARRO MD,ANTONIO L, MULVANE
 CARRO MD,F AURELIO, MIAMI,FL
 CARYER,RONALD C, KANSAS CITY
 CASEY MD,JAMES L, HUTCHINSON
 CASHMAN JR MD,MAURICE R, TOPEKA
 CASIDY,SHANNON L, SHAWNEE MISSION
 CASTEEL MD,CHARLES K, SHAWNEE MISSION
 CASTRISOS,JAMES C, KANSAS CITY
 CATE MD,BAIN C, WICHITA
 CATHCART-RAKE MD,WILLIAM F, SALINA
 CATO LOWER MD,TERI A, WICHITA
 CATTANED MD,ERNEST A, SHAWNEE MISSION
 CATTANED,JOHN E, KANSAS CITY
 CAUBLE MD,WILBUR G, WICHITA
 CAUGHLIN MD,GERALD MICHAEL, WICHITA
 CAVANAUGH MD,CLAIR J, GREAT BEND
 CAVANAUGH MD,TERRENCE J, GREAT BEND
 CAVANAUGH MD,TIMOTHY B, KANSAS CITY
 CAWLEY MD,LED P, WICHITA
 CECIL III MD,JOHN, HAYS
 CEDERLIND MD,CRANSTON JAY, SHAWNEE MISSION
 CERVENY MD,CARLA J, KANSAS CITY
 CESARETTI MD,LUKE S, HUTCHINSON
 CHAFFEE MD,DEAN C, ABILENE
 CHAFFEE MD,TERRY L, KANSAS CITY
 CHALIAN MD,ALEXANDER R, KANSAS CITY
 CHALLA MD,SHEKHAR K, TOPEKA
 CHAMBERLIN JR MD,CECIL R, NEWPORT,DR
 CHANEY MD,ERNIE J, WICHITA
 CHANG MD,C H JOSEPH, KANSAS CITY
 CHANG MD,FREDERIC C, WICHITA
 CHANG,CRAIG G, KANSAS CITY
 CHANG,MDRIS, WICHITA
 CHARD MD,FREDERICK H, WICHITA
 CHAVEZ MD,CARLOS A, HOLTON
 CHEDIAK MD,ELIAS, LAWRENCE
 CHEN MD,CHU-CHI, TOPEKA
 CHEN MD,TAK-MING, TOPEKA
 CHENG MD,MEI Y, WICHITA
 CHERNOFF MD,MARY A, KANSAS CITY
 CHERRY JR MD,ARTHUR C, TOPEKA
 CHERVEN MD,PHILIP L, WICHITA
 CHHATRE MD,MADHUKAR, KANSAS CITY
 CHIN MD,TOM D, KANSAS CITY
 CHD MD,CHENG T, KANSAS CITY
 CHD MD,SECHIN, WICHITA
 CHO,STEVE Y, WICHITA
 CHONKO MD,ARNOLD M, KANSAS CITY
 CHOPRA MD,RAMAN, WICHITA
 CHOTIMONGKOL MD,ANUPONG, DODGE CITY
 CHOW MD,STANLEY Y, FORT SCOTT
 CHOWHARY MD,RAVI, SHAWNEE MISSION
 CHDY MD,JAMES K L, SUN CITY,AZ
 CHRISTENSEN MD,ERIC C, KANSAS CITY,MO
 CHRISTENSEN MD,MARION D, KIOWA
 CHRISTENSEN MD,SHANE R, KANSAS CITY,MO
 CHRISTIAN,MARY K, WICHITA
 CHRISTMAN JR MD,CARL, WICHITA
 CHRONISTER MD,BERT, NEDDESHA
 CHUBB MD,RICHARD M, BAXTER SPRINGS
 CHUNG MD,CLARA K, BIRMINGHAM,AL
 CHUNG MD,JOHN J, SHARON SPRINGS
 CIRTSKI MD,GREGORY A, SHAWNEE MISSION
 CISKEY MD,WILLIAM J, EUREKA

CLAASSEN MD,MILTON A, NEWTON
 CLAASSEN MD,SAMUEL D, MCPHERSON
 CLAIBORNE MD,RICHARD A, WICHITA
 CLARK MD,COURTNEY, WICHITA
 CLARK MD,CRAIG N, TOPEKA
 CLARK MD,DAVID H, SALINA
 CLARK MD,DEAN M, CHICAGO,IL
 CLARK MD,LAURENCE A, WAMEGO
 CLARK MD,RAY A, LAKE CHAS,LA
 CLARK MD,ROBERT G, WICHITA
 CLAWSON MD,D KAY, KANSAS CITY
 CLENDENIN MD,ROBERT KEELE, FALLBROOK,CA
 CLIFTON MD,H DAVID, WICHITA
 CLINE MD,BYRON W, WICHITA
 CLDUGH,JOHN A, KANSAS CITY,MO
 COALE MD,LLOYD H, KANSAS CITY
 COATS MD,BARBARA S, WICHITA
 COBB MD,JEANNINE H, WICHITA
 COBB MD,LESLIE H, MULVANE
 COCHRAN MD,KEVIN S, KANSAS CITY
 COCHRAN MD,PAUL W, TOPEKA
 COCHRAN,KIMBERLY A, DLTATHE
 CODE MD,RICHARD D, DLTATHE
 COFFEY MD,CHARLES R, WICHITA
 COHEN MD,JUSTIN THOMAS, WICHITA
 COHEN MD,LOUIS, TOPEKA
 COHEN MD,ROBERT A, SHAWNEE MISSION
 COHLMIA MD,JERRY B, WICHITA
 COHLMIA,SAM N, KANSAS CITY
 COKELEY MD,JOHN M, TOPEKA
 COKER JR MD,GRADY N, HUTCHINSON
 COKER MD,W LAURENCE, TOPEKA
 COLE MD,RICHARD F, CANEY
 COLE MD,WARD M, WELLINGTON
 COLEMAN MD,GARY, ABILENE
 COLEMAN MD,ROBERT L, SHAWNEE MISSION
 COLEMAN MD,THOMAS J, WICHITA
 COLLIER MD,HARDL W, WICHITA
 COLLIER MD,WILLIAM J, MCPHERSON
 COLLINS MD,DEAN T, TOPEKA
 COLLINS MD,EDWARD JOSEPH, TOPEKA
 COLLINS MD,JEFFREY S, KINGSVILLE,TX
 COLYER MD,JEFFREY W, WASHINGTON,DC
 COMBS MD,PETER S, LEAVENWORTH
 CONANT MD,FERRILL R, SMITH CENTER
 CONANT MD,MERRILL, DODGE CITY
 CONARD MD,CLAIR C, DDOGE CITY
 CONCANNON MD,CRAIG A, BELDIT
 CONCEPTION JR MD,EUGENIO S, WICHITA
 CONE,PATRICIA A, KANSAS CITY
 CONNELL,CHRISTINA Y, WICHITA
 CONNER MD,BRIAN, SALINA
 CONOVER MD,MARGARET A, TOPEKA
 CONRADY MD,PETER A, WICHITA
 CONROW MD,JEFFREY K, TOPEKA
 CONROY MD,ROBERT W, TOPEKA
 CDDK D,D, RANDY A, HAYS
 COOK EXEC DIR ,BYRON, TOPEKA
 CDDK MD,DONALD RAY, WICHITA
 CDDK MD,G EDWARD, WICHITA
 CODLEY MD,DAVID A, SHAWNEE MISSION
 CODLEY MD,DENNIS M, TOPEKA
 CODMER MD,TYLER E, PITTSBURG
 CODN MD,STEPHEN D, TOPEKA
 CDDPER MD,ARTHUR E, NEWTON
 CDDPER MD,CATHY N, EL DORADD
 CDDPER MD,JACK R, SHAWNEE MISSION
 CDDPER MD,JAMES L, SALINA
 CDDPER MD,LED F, DREXEL,MO
 CDDPER MD,M KENT, WICHITA
 CDDPER MD,TELL B, DLTATHE
 CDDPLE JR MD,HAL E, TOPEKA
 CDRBIN MD,MURRAY D, KANSAS CITY
 CDRDELL MD,LARRY D, SHAWNEE MISSION
 CORDER MD,ROBERT L, ST JOSEPH,MO
 CDRORY JR MD,V RAY, WICHITA
 CORNELL MD,EARL G, PARSONS
 CORNELL,KELLEY M, WICHITA
 COSSETTE MD,JERROLD E, SALINA
 COSSMAN MD,F PRICE, WICHITA
 COSTA,JOHN A, SHAWNEE MISSION
 COTTON MD,ROBERT T, TOPEKA
 COUTLER D,D, THAYNE A, CLYDE
 COULTER MD,HENRY F, SHAWNEE MISSION
 COULTER MD,THOMAS B, SHAWNEE MISSION
 COWLES MD,TRACY A, KANSAS CITY
 CDX III MD,IRA L, KANSAS CITY
 CDX JR MD,IRA, SHAWNEE MISSION
 COX MD,GLENDON G, KANSAS CITY
 COX MD,ROBERT H, HAYS
 COX,REAGAN M, KANSAS CITY
 COX,STEVEN W, KANSAS CITY
 COYLE,DEBORA S, WICHITA
 CRAADDCK,TERRY M, KANSAS CITY
 CRAIG MD,CHARLES C, NEWTON
 CRAIG MD,THOMAS A, JUNCTION CITY
 CRAM JR MD,DLE R, LARNED
 CRAM MD,ERNEST R, ST FRANCIS
 CRAMPTON CAROTHERS,KARREL L, WAUWATOSA,WI
 CRANE MD,CHARLES H, MANHATTAN
 CRANE MD,DAVID D, WICHITA
 CRANE MD,REBECCA S, ARKANSAS CITY
 CRARY MD,JOHN E, TOPEKA
 CREDITOR MD,MORTON C, KANSAS CITY
 CRENSHAW MD,REBECCA S, KANSAS CITY
 CRESWELL ROHLMAN MD,VALERIE, WICHITA
 CRISP-LINDGREN MD,NADMA, WICHITA

*Probationary members.

CROCKETT MD,CHARLES A, KANSAS CITY
CRONIN MD,DONALD J, WICHITA
CROSKELL,SARAH E, SHAWNEE MISSION
CROSS,KAREN K, KANSAS CITY
CROUCH MD,STEVEN W, TOPEKA
CROUCH MD,WILLIAM H, TOPEKA
CROW MD,ERNEST W, WICHITA
CROWLEY MD,EDWARD X, WICHITA
CULLAN MD,GEDRGE E, HUTCHINSON
CULLAN MD,SAMUEL K, KANSAS CITY,MO
CULP MD,LDUIS M, KANSAS CITY
CULTRON MD,FRANK T, SALINA
CULVER D D,SONYA KATHERINE, ERIE
CULVER MD,WARREN T, LAWRENCE
CUMMINGS MD,RICHARD J, WICHITA
CURTIS MD,JEFFERY L, TOPEKA
CZAPANSKY-BEILMAN MD,DESIREE, WICHITA

D

D'SOUZA MD,BISMARCK C, SALINA
DAHL MD,DAVID C, KANSAS CITY
DAIZ MD,ANTONID S, PARSONS
DAKHIL MD,SHAKER R, WICHITA
DALUM MD,PETER JOSEPH, CLAY CENTER
DAMMON JR MD,JAMES W, TOPEKA
DANBY MD,JOHN H, WICHITA
DANIELS MD,HERBERT A, KANSAS CITY
DANIELS MD,ROBERT M, VALLEY CENTER
DANIELS,PATRICIA M, KANSAS CITY
DANSILL MD,DAVID J, COLUMBIA,MO
DARR MD,RICHARD B, KANSAS CITY
DARRAH MD,JOY N, WICHITA
DATTIL,FREDERICK, SHAWNEE MISSION
DATTILD MD,RAYMOND, TOPEKA
DAUGHETY MD,TED W, TOPEKA
DAVIA MD,JAMES E, SHAWNEE MISSION
DAVIDSON,RANDY G, WICHITA
DAVIS MD,CHESTER R, TOPEKA
DAVIS MD,CHRISTOPHER G, KANSAS CITY
DAVIS MD,DAVID R, EMPORIA
DAVIS MD,KEVIN B, NEWTON
DAVIS MD,PAUL H, WICHITA
DAVIS MD,RICHARD E, KANSAS CITY,MO
DAVIS MD,RONALD B, WICHITA
DAVISON MD,JDE D, WICHITA
DAY MD,HOWARD, WICHITA
DE BAKKER MD,JAN B, WICHITA
DE BOISE MD,DOUGLAS, WICHITA
DE HART MD,ARTHUR DONIVA, WICHITA
DE LA PEDRAJA,JDGRG L, KANSAS CITY
DE WITT MD,BARBARA L, KANSAS CITY
DECKER MD,DONALD D, HALSTEAD
DEES MD,DANIEL J, SALINA
DEFREECE,DANIEL J, SHAWNEE MISSION
DEGNER MD,JAMES C, WICHITA
DEGNER MD,REX A, KANSAS CITY
DEITZ MD,MICHAEL R, SHAWNEE MISSION
DEJONG MD,DAVID C, WICHITA
DELGADO MD,SERGIO, TOPEKA
DELGADO MD,SERGIO VICTOR, TOPEKA
DELMORE MD,JAMES E, WICHITA
DELPHIA MD,ROBERT E, DLTATHE
DEMOS MD,ELEANDR P, WICHITA
DEMOTT MD,WAYNE R, KANSAS CITY
DENISON MD,TERRY R, SHAWNEE MISSION
DENNING MD,DALE P, LAWRENCE
DENNIS MD,DAVID T, SALINA
DENNIS MD,MICHAEL W, SHAWNEE MISSION
DEPENBUSCH MD,FRANCIS L, HUTCHINSON
DERRINGTON MD,KENNETH L, SHAWNEE MISSION
DETURK MD,OWAYNE L, SALINA
DEVINE,ROBERT P, KANSAS CITY,MO
DEVINS MD,GEDRGE S, KANSAS CITY,MO
DEVSS MD,MARK R, WICHITA
DIALLO MD,GASTON I, LEAVENWORTH
DICK JR MD,HENRY J, EMPORIA
DICK MD,WILLIS G, IOLA
DICKERSON MD,ROBERT M, ULYSSES
DICKINSON MD,CHARLES R, COFFEYVILLE
DICKINSON,JAMES M, KANSAS CITY,MO
DIEHL MD,ANTONI M, SHAWNEE MISSION
DIENER MD,CLAYTON H, HESSTON
DILLARD MD,SANDY R, WICHITA
DILLON MD,STEVEN C, PRATT
DILLON MD,WILLIAM L, PARSONS
DISIERE MD,JOHN, EUREKA,CA
DIXON MD,RAYMOND W, COFFEYVILLE
DOAK MD,BASCOM P, NESS CITY
DOAN MD,TRINAH, WICHITA
DDANE MD,JOHN F, WICHITA
DOBARTZ MD,ROBERT A, BELOIT
DOBARTZ,DAVID E, KANSAS CITY
DOCKHORN MD,ROBERT J, SHAWNEE MISSION
DOEBLIN MD,P LAURENCE, WICHITA
DOHERTY MD,WILLIAM R, PALM DESERT,CA
DOLAN JR MD,PHILIP JARVIS, WICHITA
DONATELLE MD,EDWARD P, WICHITA

DDNEPUDI MD,RAD S, TOPEKA
DONLEY MD,JAMES L, SHAWNEE MISSION
DONNELL MD,JAMES M, WICHITA
DONNELLY MD,WILLIAM P, SHAWNEE MISSION
DOORNBOS MD,DANIEL C, WICHITA
DOORN MD,CURTIS C, WICHITA
DOORSCH MD,JOHN N, WICHITA
DOSS MD,J RICHARD, HAYS
DOUBEK MD,DEBBIE L, SHAWNEE MISSION
DOUBEK MD,HERBERT D, BELLEVILLE
DOUGHERTY JR MD,THOMAS M, LARNED
DOUGHERTY MD,THOMAS M, GARNETT
DOUTHIT MD,DOUGLAS DAVID, WICHITA
DOW MD,SEAN B, WICHITA
DOWNARD MD,JAMES M, COLUMBIA,MO
DOWNING MD,GREGORY C, WICHITA
DRAEMEL MD,H RICHARD, SALINA
DRAKE MD,CYNTHIA K, SHAWNEE MISSION
DRAKE MD,DOUGLAS J, BELOIT
DRAKE MD,RALPH L, WICHITA
DRASIN MD,DENA K, SHAWNEE MISSION
DRAZEK MD,GEDRGE, WICHITA
DRAZEK MD,JANE K, WICHITA
DREHER MD,HENRY S, SALINA
DREILING MD,ROGER J, SHAWNEE MISSION
DREVETS MD,CURTIS C, WICHITA
DUCKETT II MD,THOMAS G, SHAWNEE MISSION
DUCKETT MD,THOMAS G, HIAWATHA
DUGEDON MD,MAUREEN, SHAWNEE MISSION
DUGAN MD,DAVID L, WICHITA
DUGGINS,MAURICE L, KANSAS CITY
DUICK MD,GREGORY, WICHITA
DUJDVNE MD,CARLOS A, KANSAS CITY
DULIN MD,JOSE I, KANSAS CITY
DUNAGIN MD,JACK A, TOPEKA
DUNCAN MD,KIRK A, SHAWNEE MISSION
DUNIVEN MD,PHILIP L, TOPEKA
DUNLAP MD,PATRICK S, FORT SCOTT
DUNLAP MD,RICHARD L, LAWRENCE
DUNN MD,DANIEL R, SCOTT CITY
DUNN MD,MARVIN I, KANSAS CITY
DUNSHIE MD,CARLYLE M, FORT SCOTT
DUNSHIE MD,CHERYL A, FORT SCOTT
DURANO MD,ANTONID C, WICHITA
DURHAM,JANE, SHAWNEE MISSION
DURKEE MD,BRUCE W, SHAWNEE MISSION
DURKEE MD,WILLIAM R, MANHATTAN
DURST JR MD,ROBERT D, TOPEKA
OUTTA MD,SAKUNTALA S, WICHITA
DUYSAK MD,SAMI, LEAVENWORTH
DYCK MD,ERIC LEE, HAYS
DYCK MD,GEDRGE, NEWTON
DYE MD,JAMES D, WICHITA
DYE,DIANNA P, KANSAS CITY,MO
DYSART MD,JACK C, STERLING

E

EASTES MD,GARY DEAN, HALSTEAD
EATON MD,EDWARD L, TOPEKA
EATON MD,GLEN E, SALINA
EATON MD,LESLIE F, SALINA
ECK MD,MARCI J, GREAT FALLS,MT
ECK MD,MARIE M, WICHITA
ECKART MD,DE MERLE E, HUTCHINSON
ECKERT MD,WILLIAM G, WICHITA
ECKERT,CYNTHIA S, KANSAS CITY
EDDS MD,BRECK A, TOPEKA
EDDY MD,VICTOR M, HAYS
EDEL,THOMAS A, KANSAS CITY
EDMONDS MD,MARTA J, SHAWNEE MISSION
EDSELL,THOMAS, KANSAS CITY
EDWARDS MD,DAVID J, EMPORIA
EDWARDS MD,HANIS C, WICHITA
EDWARDS MD,SHELLEY J, KANSAS CITY
EGBERT MD,ANNE MARSH, WICHITA
EGELHOF MD,RICHARD H, WICHITA
EICHORN MD,FRANK D, GARDEN CITY
EINSPAHR MD,DAVID E, WICHITA
EL-GHAZZAWY,ADEL G, KANSAS CITY
ELCOCK MD,DAVID G, SHAWNEE MISSION
ELDER MD,D MIKEL, TOPEKA
ELLIS MD, S CHRISTOPHER, DLTATHE
ELLIS MD,BOBBY J, INDEPENDENCE
ELLIS,STEVEN F, SHAWNEE MISSION
ELLISON MD,PAUL D, SALINA
EMAMI MD,ABBAS, KANSAS CITY
EMMOTT MD,DAVID F, SHAWNEE MISSION
EMPSON MD,CHARLES L, INDEPENDENCE
ENDERS MD,WRAY, SHAWNEE MISSION
ENGELBRECHT MD,DIANE E, KANSAS CITY
ENGELKEN MD,SUSAN F, DNAGA
ENGEN MD,PHIL L, KANSAS CITY
ENNS MD,EUGENE K, NEWTON
ENNS MD,JAMES H, LAKE HAVASU CTY,AZ
ENDICH III,DUARD W, WICHITA
ENOCH MD,ROLLAND, WICHITA
ENS MD,GERHARD GEORGE, HILLSBORO
ENS MD,PETER D, HILLSBORO
ENSRDTH MD,KENNETH A, TOPEKA
EPLEE MD,JOHN R, ATCHISON
ERDWIEN MD,BARBARA A, EL DORADO

ERENBERG MD,ALLEN, KANSAS CITY
ERICKSON MD,CLARENCE W, PITTSBURG
ERICKSON MD,KENT E, CLAY CENTER
ERKEN MD,RONALD V, WICHITA
ERNST MD,TARI MAE, WICHITA
ESCH MD,JOHN G, ISLAND PARK,IO
ESRIG D.D.,HARDL L, SHAWNEE MISSION
ESTEP MD,THOMAS H, WICHITA
ESTES MD,NORMAN C, KANSAS CITY
ESTRADA MD,EDMUNDO C, LIBERAL
ESTRADA MD,LINA, LIBERAL
ETZENHUSER III MD,RUSSELL D, SHAWNEE MISSION
EUBANKS MD,KIMBER L, KANSAS CITY
EVANS JR MD,WILLIAM E, SHAWNEE MISSION
EVANS MD,CAROL ANN, SHAWNEE MISSION
EVANS MD,FARRIS D, WICHITA
EVANS MD,JOHN F, WICHITA
EVANS MD,RICHARD K, KANSAS CITY
EVANS MD,ROGER WILLIAMS, WICHITA
EVANS MD,WILLIAM R, GREAT BEND
EVANS,GENE H, KANSAS CITY
EWING MD,DAVID L, KANSAS CITY
EYSTER MD,ROBERT L, WICHITA

F

FABACHER MD,JEFFREY E, TOPEKA
FAILING MD,TRENT L, DLTATHE
FAIRCHILD MD,RICHARD S, TOPEKA
FAKHOURY,MARK, KANSAS CITY
FALTER MD,RICHARD T, HUTCHINSON
FALTER,RICHARD T, KANSAS CITY
FANNING MD,JANET L, EL DORADO
FANNING MD,KYLE W, EL DORADO
FARHA MD,GEORGE J, WICHITA
FARHA MD,S JIM, WICHITA
FARLEY MD,JAMES A, WICHITA
FARMER III D.O., F J, STAFFORD
FAST MD,GARY A, WICHITA
FAST MD,ROBERT E, ATCHISON
FAST MD,W SPENCER, ATCHISON
FAULK,L CHRISTINE, KANSAS CITY
FEAGAN MD,JERRY, TOPEKA
FEAGINS ALEXANDER MD,SHIRLEY J, WICHITA
FEAREY MD,ALAN J, WICHITA
FEDOR MD,BARBARA, HALSTEAD
FEENAN MD,JOHN M, DLTATHE
FEIFAREK MD,MICHAEL J, TOPEKA
FEIGHNY MD,ROBERT E, SALINA
FELDMAYER MD,SEELEY T, MEADE
FELT MD,SAMUEL E, WICHITA
FELTS MD,ARTHUR D, SHAWNEE MISSION
FENT II MD,LEE S, HAYS
FENT MD,LEE S, NEWTON
FENTON MD,ROBERT M, GARDEN CITY
FERGUSON DO,ELAINE L, SALINA
FERGUSON,DIANE M, KANSAS CITY
FERNANDEZ MD,HECTOR D, WICHITA
FERNANDEZ MD,LUIS A, TOPEKA
FERRARI MD,VICTOR S, KANSAS CITY
FERREE MD,RICHARD ALLAN, MCPHERSON
FERRIS MD,BRUCE G, WICHITA
FEUILLE JR MD,EDMOND G, WICHITA
FIELD MD,RICHARD A, TOPEKA
FIELD-KRESIE MD,DEBBIE A, TOPEKA
FIELD,CHARLES E, KANSAS CITY
FIELDS D.O.,STEPHEN, WICHITA
FIELDS MD,GALEN W, MCPHERSON
FIESER MD,CARL W, GREAT BEND
FIKE,EDGAR A, KANSAS CITY
FILLE MD,VERNON W, PRATT
FINK MD,ABRAHAM A, PLANTATION,FL
FINLEY MD,BRENT E, KANSAS CITY
FISCHER MD,REX R, MANHATTAN
FISHER MD,JAMES B, COLORADO SPRINGS,CO
FISHER MD,RAY F, WICHITA
FISHER,KAY, KANSAS CITY
FITZGERALD MD,DAVID A, TOPEKA
FITZGERALD MD,EDWARD J, WICHITA
FITZIG MD,SANFORD, WICHITA
FITZPATRICK HARRIS MD,PAMELA, KANSAS CITY
FITZSIMMONS,CURTIS J, KANSAS CITY
FLANDERS MD,H ALDEN, MC ALLEN,TX
FLANNER MD,FRANK R, LEAVENWORTH
FLATT MD,DAVID, WICHITA
FLEMING MD,FORNEY W, WICHITA
FLESKE MD,LEONARD T, GREAT BEND
FLDERSCH MD,HUBERT M, LAWRENCE
FLOWERS JR MD,CLELL B, WICHITA
FORD MD,CHARLES R, WICHITA
FORDYCE MD,NORMAN, SHAWNEE MISSION
FORET MD,JOHN D, KANSAS CITY
FORSTER MD,JAMESON, KANSAS CITY
FORTUNE MD,CEDRIC B, DLTATHE
FOSS MD,DANIEL C, HUTCHINSON
FOSTER MD,D BERNARD, TOPEKA
FOSTER MD,FRANCES J, KANSAS CITY
FOWLER MD,DENNIS L, DLTATHE
FOWLER MD,ROBERT J, WICHITA
FOWLER MD,WAYNE L, CONCORDIA
FOX MD,DEANNA K, KANSAS CITY
FRANCIS MD,ANTHONY E, SALINA
FRANCIS MD,NORTON L, WICHITA
FRANCISCO MD,CLARENCE L, SHAWNEE MISSION

*Probationary members.

FRANCISCO MD,DAN A, WICHITA
FRANCISCO MD,LINDA L, WICHITA
FRANCISCO MD,W DAVID, KANSAS CITY
FRANK MD,GEORGE M, BEAVERTON,OR
FRANK MD,MARY S, TOPEKA
FRANK,KENNETH J, SHAWNEE MISSION
FRANKEL MD,SCOTT J, SHAWNEE MISSION
FRANKLIN JR MD,BENJAMIN A, TOPEKA
FRANSEN MD,PAUL H, NEWTON
FREDRICKSON MD,DUANE E, LINDSBORG
FREDRICKSON,DAVID P, KANSAS CITY
FREDRICKSON,ERIC R, KANSAS CITY
FREEBORN JR MD,WARREN S, CLYDE
FREEMAN MD,F GILES, PRATT
FREEMAN MD,FRED A, MANHATTAN
FREEMAN MD,RAYMOND S, SALINA
FRENCH MD,JAMES E, WICHITA
FRENCH MD,JEROME E, WICHITA
FRENKEL MD,JACOB K, KANSAS CITY
FRESE MD,DANIEL R, COUNCIL GROVE
FRIEDMAN MD,DAVID A, SHAWNEE MISSION
FRIESEN MD,DALE, LAWRENCE
FRIESEN MD,DOUGLAS A, HUTCHINSON
FRIESEN MD,DOUGLAS L, HALSTEAD
FRIESEN MD,ORLANDO J, N NEWTON
FRIESEN MD,STANLEY R, SHAWNEE MISSION
FRITZEMEIER MD,WILLIAM H, WICHITA
FROGGE MD,JAMES M, VISTA,CA
FROMER MD,JOEL, WICHITA
FROMM MD,ARTHUR H, WICHITA
FRUEND MD,WILLIAM L, TOPEKA
FRY MD,LUTHER L, GARDEN CITY
FUGATE MD,CARL L, BELOIT
FULBRIGHT MD,THOMAS W, LAWRENCE
FULTON MD,JOHN K, WICHITA
FUNK MD,EDWARD D, EUDORA

G

GABA MD,JAMES E, KANSAS CITY
GABBARD MD,GLEN O, TOPEKA
GABRIELLI JR MD,WILLIAM F, SHAWNEE MISSION
GAFFNEY MD,GARY R, KANSAS CITY
GAGE MD,BETSE M, SHAWNEE MISSION
GALICIA MD,JOSEPH P, WICHITA
GALLEHUGH MD,KEITH W, SHAWNEE MISSION
GALVAN MD,ALONSO, WICHITA
GANDHI MD,SHANTIKUMAR K, TOPEKA
GANN MD,E LAMONTE, EMPORIA
GANS MD,FREDERICK A, SALINA
GANZARAIN MD,RAMON C, TOPEKA
GARCIA MD,GOULD C, EMPORIA
GARCIA MD,GUILLERMO O, DODGE CITY
GARCIA-FERRER MD,FRANCISCO, SHAWNEE MISSION
GARD MD,RAYMOND F, WICHITA
GARDNER MD,J DOUGLAS, TOPEKA
GARDNER MD,JAMES D, MANHATTAN
GARDNER MD,JARED J, WICHITA
GARLOW MD,WILLIAM B, SALINA
GARNER, WILLIAM J, KANSAS CITY
GATENO MD,JOSEPH, GREAT BEND
GATSCHET MD,TIMOTHY P, HAYS
GAUGHAN EXEC DIR,CAROLYN N, WICHITA
GAUGHAN MD,MICHAEL J, SHAWNEE MISSION
GAUGHAN MD,REBECCA N, OLATHE
GAY MD,JOHN D, TOPEKA
GAYNES MD,STUART M, KANSAS CITY
GEENEWS D.O.,DOUGLAS L, TOPEKA
GEHRT MD,EARL B, CHANUTE
GEIS MD,DICK A, TOPEKA
GEIST MD,MICHAEL J, TOPEKA
GEITZ MD,JAMES M, EMPORIA
GEMPERLI,AMY WISE, SHAWNEE MISSION
GENCH MD,RAYMOND L, CARMEL,CA
GENDEL MD,JOSEPH E, TOPEKA
GENILO MD,CELESTE A, WICHITA
GENTRY MD,JAMES H, DENVER,CO
GENTRY MD,KALE C, SHAWNEE MISSION
GEORGE MD,EARL F, WICHITA
GERBER MD,ALLEN D, WICHITA
GERJARUSAK MD,PRAPAS, SHAWNEE MISSION
GETTLER MD,DEAN T, FORT SCOTT
GIESSEL MD,MICHAEL D, TOPEKA
GILBERT II MD,JOHN H, GARDEN CITY
GILBERT MD,J HOWARD, SENECA
GILHOUSEN MD,FREDERIC M, KANSAS CITY
GILL MD,GEORGE L, LAMPE,MO
GILLEN MD,BILLY A, SHAWNEE MISSION
GILLES MD,HELEN M, LAWRENCE
GILLETTE MD,MARK L, TYLER,TX
GILLETTE MD,DANIEL W, WICHITA
GILLILAND MD,CRAIG L, KANSAS CITY
GILLOGLY,MARILYN B, KANSAS CITY
GILMARTIN MD,RICHARD C, WICHITA
GIMPLE MD,KENNETH, TOPEKA
GINAVAN MD,DUANE A, EMPORIA
GLEASON MD,JIMMIE A, TOPEKA
GLEASON,DOUGLASS S, KANSAS CITY
GLENN MD,JAMES N, EMPORIA

GLENN MD,LYLE G, PROTECTION
GLOYER II MD,RICHARD M, SHAWNEE MISSION
GLDYER MD,RICHARD M, NEWTON
GNAU MD,FREDRIC B, HALSTEAD
GODFREY MD,WILLIAM A, KANSAS CITY,MO
GODWIN MD,PHILLIP A, LAWRENCE
GOERING MD,DONALD D, COLDWATER
GOERING MD,RANDALL V, WICHITA
GOERTZ MD,LEO R, SHAWNEE MISSION
GOINS MD,BONNIE K, SHAWNEE MISSION
GOLDBERG MD,HERBERT R, WICHITA
GOLDSTEIN MD,ESTELLE T, WICHITA
GOLDSTEIN MD,GERALD L, SHAWNEE MISSION
GOLDSTEIN,JOYCE, SHAWNEE MISSION
GOLLIER II MD,ROBERT A, OTTAWA
GOLLUB MD,STEVEN B, KANSAS CITY
GOMETZ MD,MODESTO S, PITTSBURG
GOMEZ MD,FRANCISCO, SHAWNEE MISSION
GONZALEZ MD,HIRAM, WICHITA
GONZALEZ,IRIS P, KANSAS CITY,MO
GOOD D O,FREDERICK C, WICHITA
GOOD MD,JAMES T, FORT SCOTT
GOOD MD,HENDELL LISLE, SHAWNEE MISSION
GOODPASTURE MD,HEWITT C, WICHITA
GOODWIN MD,DONALD W, KANSAS CITY
GOODWIN MD,JOHN A, SHAWNEE MISSION
GOODWIN MD,MARY K, GODDARD
GORACKE MD,DOUGLAS S, WICHITA
GORDON MD,JAMES R, WICHITA
GOTO MD,HIROSHI, KANSAS CITY
GOYLE MD,KRISHAN K, WICHITA
GOYLE MD,VIMAL, WICHITA
GRABAU MD,GUY M, WICHITA
GRACE,CAROL, SHAWNEE MISSION
GRAESSLE DO,DONNA M, SHAWNEE MISSION
GRAHAM JR MD,ARNOLD R, KANSAS CITY,MO
GRAHAM MD,BRUCE D, SHAWNEE MISSION
GRAHAM MD,JAMES R, KANSAS CITY,MO
GRAHAM MD,KENNETH L, LEAVENWORTH
GRAHAM,JOHN D, WICHITA
GRANT MD,MICHAEL D, SALINA
GRANT MD,MICHAEL E, SHAWNEE MISSION
GRANTHAM MD,HERBERT G, FORT SCOTT
GRANTHAM MD,JARED J, KANSAS CITY
GRANTHAM,J AARON, SHAWNEE MISSION
GRASHOFF MD,JOYCE A, SHAWNEE MISSION
GRATNY,LINDA L, LEAVENWORTH
GRAUEL MD,CHARLES W, WICHITA
GRAVES MD,JACK W, WICHITA
GRAVES MD,KATHRYN, HUTCHINSON
GRAY MD,C LUCIEN, WICHITA
GRAY MD,DAVID E, TOPEKA
GRAY MD,H TOM, WICHITA
GRAY MD,PATRICK W, HAYS
GRAY MD,SCOTT E, LAWRENCE
GRAY,APRIL K, KANSAS CITY,MO
GRAYIB MD,ANTOINE S, TOPEKA
GREEN,BART P, KANSAS CITY
GREENBERG MD,GEORGE E, DODGE CITY
GREENBERG MD,MARK, TOPEKA
GREENBERGER MD,N J, KANSAS CITY
GREENE MD,HORACE T, TOPEKA
GREENE MD,LAWRENCE S, KANSAS CITY
GREENE MD,RUSSELL E, TOPEKA
GREENWOOD MD,JAMES F, GARDEN CITY
GREENWOOD MD,MELANIE A, WICHITA
GREER MD,JAMES A, WICHITA
GREER MD,RICHARD H, TOPEKA
GRENE MD,ROBERT BRUCE, WICHITA
GRIEBEL MD,DONNA J, WICHITA
GRIFFIN MD,JOHN F, KANSAS CITY
GRIFFITH MD,FRANK H, SALINA
GRIFFITT MD,WESLEY E, KANSAS CITY
GRILLOT MD,FLOYD B, PALM HARBOR,FL
GRILLOT MD,MICHAEL B, WICHITA
GRIMALDI MD,GARY A, PITTSBURG
GRIMES MD,I ROSS, LIBERAL
GRIMES MD,JAMES T, LYONS
GRIN MD,TRUDI R, SHAWNEE MISSION
GRINIS MD,GEDAS M, HUTCHINSON
GRISOLIA MD,ANDRES, LEAVENWORTH
GRISSOM MD,RHONDA G, SHAWNEE MISSION
GRISWOLD MD,DALE G, NEWTON
GROSS MD,BRIAN M, WICHITA
GROSSER,DAVID M, KANSAS CITY
GROSSMAN MD,HARVEY M, SHAWNEE MISSION
GROWNIEY MD,DANIEL J, ATCHISON
GRUENDEL MD,RICHARD A, KANSAS CITY
GRUENDEL MD,VIRGINIA T, KANSAS CITY
GRUNDMEIER MD,ANNETTE M, SHAWNEE MISSION
GRUSHNYS MD,ARNOLD, WICHITA
GSELL MD,GEORGE F, WICHITA
GUILLAUME,CAROLE A, KANSAS CITY
GUNN MD,MARVIN R, SALINA
GUPTA MD,GANESH G, WICHITA
GUPTA,ARCHANA, WICHITA
GUTHRIE MD,RICHARD A, WICHITA
GUTOVITZ MD,ALLEN LOUIS, TOPEKA
GUTTIKONDA MD,PRASAD B, WARREN,OH

H

HABASHY MD,SHAWKY N F, WICHITA
HACKER MD,DAVID C, SHAWNEE MISSION

HACKER MD,ELAINE MARY, TOPEKA
HADLEY MD,DELMONT C, OTTAWA
HAFFNER MD,WILLIAM N, EL DORADO
HAGAN MD,C THOMAS, WICHITA
HAGAN MD,FRANCIS J, WICHITA
HAGAN MD,ROBERT C, WICHITA
HAGAN MD,STEPHEN F, WICHITA
HAGGAN MD,MARGARET E, LAWRENCE
HAIGLER MD,JAMES P, HAYS
HALE MD,RALPH, HUTCHINSON
HALE MD,WILLIAM R, NEWTON
HALL III MD,THOMAS B, KANSAS CITY
HALL MD,GARY D, SHAWNEE MISSION
HALL MD,J ROGER, WICHITA
HALL MD,ROY P, TOPEKA
HALL MD,WESLEY H, GIRARD
HALLER MD,CHRIS C, LEAVENWORTH
HALLERAN III MD,WILLIAM J, SHAWNEE MISSION
HALLEY MD,M MARTIN, TOPEKA
HALLING MD,L WILLIAM, HAYS
HALVDRSON BEESLEY,KARI J, OLATHE
HALVORSON MD,HOWARD C, OLATHE
HAM MD,ROBERT E, SALINA
HAMEL MD,GREGORY L, CHAPMAN
HAMILTON JR MD,JAMES J, TOPEKA
HAMILTON MD,JAMES J, WAKEENEY
HAMILTON,DEBORAH K, WICHITA
HAMM MD,GLENN, NEWTON
HAMM MD,ORVAL L, NEWTON
HAMMEKE MD,JOHN C, LEAVENWORTH
HAMPEL MD,JEFF A, WICHITA
HAMPEL MD,KEVIN G, WICHITA
HAMTIL MD,LAWRENCE W, SHAWNEE MISSION
HAN MD,CHAN S, COFFEYVILLE
HANCOCK MD,ALAN C, KANSAS CITY
HANCOCK MD,DANIEL E, MANHATTAN
HANDS MD,SEBEL V, AMARILLO,TX
HANDSHY MD,STANLEY E, ERIE
HANNA,DEBRA S, KANSAS CITY
HANNAH,ANNE B, KANSAS CITY,MO
HANSEN MD,ERIC E, TOPEKA
HANSEN MD,FRANK W, GARDEN CITY
HARA MD,GLENN S, KANSAS CITY
HARBIN MD,GARY LYNN, SALINA
HARD MD,BENJAMIN F, KANSAS CITY,MO
HARDEN,DAVID W, KANSAS CITY
HARDIN MD,CREIGHTON A, SHAWNEE MISSION
HARDING MD,SUSAN K, KANSAS CITY,MO
HARDTEN MD,DAVID R, BROOKLYN PARK,MN
HARMS MD,ALBERT C, SHAWNEE MISSION
HARMS MD,EDWIN M, EL DORADO
HARMS MD,WILMER A, HALSTEAD
HARPER MD,DIANE M, SHAWNEE MISSION
HARRINGTON MD,ELAINE M, WICHITA
HARRIS JR MD,CLAIB B, GARNETT
HARRIS MD,FRANK H, WICHITA
HARRIS MD,HUBERT L, TOPEKA
HARRIS MD,MARGARET H, SHAWNEE MISSION
HARRIS MD,NORMAN R, CLEARWATER,FL
HARRIS MD,PATRICIA A, TOPEKA
HARRISON MD,HALL E, TOPEKA
HARRISON MD,PAUL BARRY, WICHITA
HARRISON,PAMELA D, KANSAS CITY
HARROD,C GORDON, KANSAS CITY
HART MD,DILLIS L, WICHITA
HART MD,JOHN J, WICHITA
HART MD,KELLY Z, KANSAS CITY
HART MD,LAWRENCE E, ATCHISON
HARTLEY MD,FOUNT K, WICHITA
HARTLEY MD,JAMES M, WICHITA
HARTLEY MD,ROY W, NORTON
HARTMAN MD,GERALD V, SHAWNEE MISSION
HARTMAN MD,KECK R, WICHITA
HARTMAN MD,ROGER L, NORTON
HARTONG MD,TOBY JOSEPH, SHAWNEE MISSION
HARTONG MD,WILLIAM A, SHAWNEE MISSION
HARTWELL MD,KIMBERLY, WICHITA
HARTWELL MD,RICK L, WICHITA
HARTY MD,JEAN R, SHAWNEE MISSION
HARVEY MD,R CLAY, TOPEKA
HARVEY MD,ROSEMARY B, WICHITA
HARWOOD MD,CLAUDE J, GLASCO
HARWOOD MD,MICHAEL R, KANSAS CITY
HASLETT MD,MARK G, TOPEKA
HASSAN MD,RIZWAN U, WICHITA
HASSELLE III MD,JAMES E, LAWRENCE
HASSLER MD,RANDY D, SALINA
HASTINGS MD,GLEN E, WICHITA
HASWELL,JAMES, KANSAS CITY
HATCHER MD,ELIZABETH R, TOPEKA
HATESOHL MD,STANLEY M, CLAY CENTER
HATHAWAY MD,PETER, SHAWNEE MISSION
HATTAMER,STEVEN, SHAWNEE MISSION
HATTON MD,DONALD W, LAWRENCE
HATTON MD,LLOYD W, SALINA
HATTRUP MD,RICHARD J, WICHITA
HAUN MD,RUDY T, MANHATTAN
HAVEKOST MD,MICHAEL C, WICHITA
HAWLEY MD,RAYMOND G, WICHITA
HAY MD,JAMES R, WICHITA
HAYES MD,J EDWARD, BOISE,ID
HAYES MD,KRIS A, HIAWATHA
HAYES MD,WILLIAM L, WICHITA
HAYNES MD,DEBORAH G, WICHITA
HAYS MD,THOMAS H, WICHITA
HEAD,DIANE E, KANSAS CITY
HEALY MD,PATRICK M, WICHITA
HEASTY MD,ROBERT G, MANHATTAN
HEBBAR MD,SATYA N, TOPEKA

*Probationary members.

HEDDEN MD,RICHARD J, CINCINNATI,OH
 HEDEGAARD MD,CHERYL K, TOPEKA
 HEDRICK MD,KENNETH E, HUTCHINSON
 HEEB MD,CAMILLE S., TOPEKA
 HEEB,JON J, KANSAS CITY
 HEIN MD,DANIEL J, SALINA
 HEISLER MD,NORMAN T, SHAWNEE MISSION
 HEIT MD,JOSEPH A, SHAWNEE MISSION
 HEMAYA MD,AMIR R, SHAWNEE MISSION
 HENDRICKS MD,K OWIGHT, KANSAS CITY
 HENDRICKS MD,WILLIAM J, PANAMA CITY,FL
 HENNEY MD, JANE E, KANSAS CITY
 HENNING JR MD,HARDLD J, MANHATTAN
 HENNING MD,CALVIN W, DTTAWA
 HENNING MD,CHARLES E, WICHITA
 HENRY,JEFFREY, KANSAS CITY
 HENSEL JR,JOHN M, KANSAS CITY,MO
 HENSON MD,STEVEN R, WICHITA
 HENSON,CHRISTOPHER E, KANSAS CITY,MO
 HENWOOD MD,JOHN R, WICHITA
 HENZLER,DAVID, KANSAS CITY
 HERBEL MD,BRYON L, DURHAM,NC
 HERBOLD MD,DAVID R., WICHITA
 HEREO MD,JOHN, WICHITA
 HERMRECK MD,ARLO S, KANSAS CITY
 HERNANDEZ,LISA M, KANSAS CITY
 HERRERA MD,JORGE J, TOPEKA
 HERRMAN MD,ADAM L, OODGE CITY
 HERRON MD,KRISTINE G, OLATHE
 HERSH MD,CHRISTOPHER K, SAN ANTONIO,TX
 HERSHBERGER OO., GROVER, WICHITA
 HERSHORN MD,SIMON E, WICHITA
 HESSE MD,JAMES F, WICHITA
 HESSER MD,HERBERT H, SHAWNEE MISSION
 HETT MD,EDWARD J, WICHITA
 HETTINGER MD,MICHAEL E, SHAWNEE MISSION
 HICKERT MD,MAUREEN C, INDIANAPOLIS,IN
 HICKS JR MD,THOMAS E, EMPORIA
 HIEBERT MD,DAVID L, LAWRENCE
 HIEBERT MD,JOHN B, LAWRENCE
 HIEBERT MD,JOHN M, KANSAS CITY
 HIESTERMAN MD,HERMAN W, QUINTER
 HIGHT, JAMES E, SHAWNEE MISSION
 HILO MD,PETER G, KANSAS CITY
 HILL MD,JAMES E, ARKANSAS CITY
 HILL MD,LARY MICHAEL, GREAT BEND
 HILL MD,RICHARD H, MEAOE
 HILL MD,ROBERT N, TOPEKA
 HILL MD,ROONEY W, SHAWNEE MISSION
 HILLYER,JOHN F, KANSAS CITY
 HILTON,KEVIN R, SHAWNEE MISSION
 HINKIN MD,DOUGLAS P, MANHATTAN
 HINSHAW JR MD,CHARLES T, WICHITA
 HINSHAW MD,ALFREDO H, WICHITA
 HINSHAW,DARLA J, KANSAS CITY
 HINTHORN MD,DANIEL R, KANSAS CITY
 HINTON, DONALD, KANSAS CITY
 HIRATZKA MD,TOMIHARU, HIGH POINT,NC
 HIRSCHBERG MD,J COTTER, TOPEKA
 HISZCZYNSKYJ MD,ROMAN, TOPEKA
 HITCHCOCK MD,C THOMAS, SHAWNEE MISSION
 HIZON MD, RAMON R, WICHITA
 HOAOLEY MD,WILLIAM O, KANSAS CITY
 HOBBS MD,DONALD D, TOPEKA
 HOBSON MD,MILBURN W, SHAWNEE MISSION
 HODDES MD,HERBERT C, SHAWNEE MISSION
 HODGES MD,MERLE A, SALINA
 HODGES MD,MERLE J, SALINA
 HODGSON MD,DAVID K, WASHINGTON
 HODGSON MD,JAMES F, KANSAS CITY
 HODSON MD,DON W, MARION
 HODSON MD,HERVEY R, WICHITA
 HOEHNE MD,TERRY G, SHAWNEE MISSION
 HOFFER MD,JOHN G, RAYMORE,MO
 HOFFMAN MD,J PHILIP, LAWRENCE
 HOFFMAN MD,JAMES E, WICHITA
 HOFFMANN MD,MARY A, LAWRENCE
 HOFFSOMMER MD,JEFFREY G, WICHITA
 HOHERZ MD,DAVID G, TOPEKA
 HDLCDB MD,WILLIAM M, LIBERAL
 HOLOCRAFT MD,JACQUELYNE, KANSAS CITY
 HOLDEN JR MD,RAYMOND F, WICHITA
 HOLOERMAN MD,WALLACE D, HUTCHINSON
 HOLLADAY MD,FRANK P, KANSAS CITY
 HOLLADAY MD,KENNETH R, EUDORA
 HOLLAND JR MD,DAVID L, RUSSELL
 HOLLIS MD,KENNETH W, WICHITA
 HOLLIDAY MD,KEVIN B, WICHITA
 HOLLOWELL MD,JOSEPH G, KANSAS CITY
 HOLMAN MD,JOHN B, SHAWNEE MISSION
 HOLMES MD,FREDERICK F, KANSAS CITY
 HOLMES MD,GRACE E, KANSAS CITY
 HOLMES MD,JOE, WICHITA
 HOLMES MD,JOHN A, KANSAS CITY
 HOLMES MD,ROBERT W, TOPEKA
 HOLSCHER MD,MARK R, PAOLA
 HOLSINGER MD, DONALD M, PITTSBURG
 HOLSTRUM MD,GAJEWSKI STACEY, RANDOLPH,VA
 HDLT MD,JOHN M, WICHITA
 HDLT MD,ROBERT E,BELLEVILLE
 HDN MD,DAVID E, WICHITA
 HODD MD,ROGER W, SHAWNEE MISSION
 HODOER MD,WILFORD D, HALSTEAD
 HDPKINS JR MD,B MORRISON, SCOTT CITY
 HDPKINS MD,JAMES P, KANSAS CITY,MO
 HDPKINS MD,LENNY, SHAWNEE MISSION

HOPKINS MD,WILLIAM O, SHAWNEE MISSION
 HOPPER MD,CHARLES R, EMPORIA
 HOPPOCK MD,KEVIN C, WICHITA
 HORBELT MD,DOUGLAS V, WICHITA
 HORNBAKER MD,STANLEY D, CARBONDALE
 HORNING MD,JOEL E, COUNCIL GROVE
 HORSLEY MD,JAMES I, WICHITA
 HIRST,DAVID A, KANSAS CITY
 HORTON MD,GREG A, KANSAS CITY
 HOSTETTER MD, M MORGAN, TOPEKA
 HOSTETTER MD,JAMES P, TOPEKA
 HOUGHTON MD,HOWARD L, KANSAS CITY
 HOURIGAN MD, RICHARD J, KANSAS CITY
 HOUSE MD,R E, SALINA
 HOUSHOLDER MD,DANIEL FAIR, WICHITA
 HOUSHOLDER MD,MARTHA S, WICHITA
 HOUSTON II MD,LAWRENCE MORLEY, SHAWNEE MISSION
 HOWARD MD,DONALD O, WICHITA
 HOWELL MD,BARBARA JOYCE, EMPORIA
 HOWERTER JR MD,BERNARD E, COFFEYVILLE
 HOYT MD,ARTHUR W, TOPEKA
 HRABIK MD,BRENT A, SHAWNEE MISSION
 HSU MD,CHENG H, TOPEKA
 HSU MD,SHIN-FU, TOPEKA
 HUANG MD,JONSON, TOPEKA
 HUDSON MD,ROBERT P, OLATHE
 HUEBERT MD,DEAN A, WICHITA
 HUEBERT, KORY, KANSAS CITY
 HUEBNER MD,ROBERT STEPHAN, PITTSBURG
 HUERTER MD,DAVID F, PITTSBURG
 HUERTER MD,QUENTIN C, KANSAS CITY
 HUFFMAN MD,OEAN G, TOPEKA
 HUGHES D D,STEVEN R, WICHITA
 HUGHES MD,DOUGLAS W, KANSAS CITY
 HUGHES MD,JOHN O, WICHITA
 HULTGREN MD,MYRON K, WICHITA
 HUMMER MD,LLOYD M, WICHITA
 HUND MD,LARRY R, WICHITA
 HUNKELER MD,JOHN O, KANSAS CITY,MO
 HUNNINGHAKE MD,RONALD, SALINA
 HUNSBERGER D.O., TERRY R, GAROEN CITY
 HUNT EXEC SEC., MARTHA, KANSAS CITY
 HUSEMAN MD,RICHARD ALLAN, SHAWNEE MISSION
 HUSER III MD,JOHN M, WICHITA
 HUSTEAO MD,ROBERT F, WICHITA
 HUSTON MD,FRANCIS W, WINCHESTER
 HUSTON MD,JOSEPH W, TOPEKA
 HUTCHINS MD,JOEL R, HOLTON
 HUTCHINSON MD,JOHN T, SALINA
 HUTCHINSON MD,STEVEN A, WICHITA
 HUTCHISON MD,GLEN C, HAYS
 HUTCHISON MD,JOE R, LEBOW
 HUTCHISON MD,MICHAEL C, KANSAS CITY
 HUTSEY MD,PAUL J, PONCA CITY,OK
 HUTTUN MD,FREDERICK A, TOPEKA
 HUYCKE MD,EDWARD J, WICHITA
 HYDER MD,JACE W, WICHITA
 HYLANO MD,JOSEPH M, TOPEKA
 HYNES MD,HENRY E, WICHITA

I

IBARRA MD,J LUIS, WICHITA
 IBARRA MD,RICHARD C, KANSAS CITY
 IDBEIS MD,BAOR, WICHITA
 ILIFF MD,R DOUGLAS, TOPEKA
 ILIOPOULOS MD,JOHN I, KANSAS CITY
 ILORETA MD,ALFREDO T, TOPEKA
 IMSEIS MD,MIKHAIL Y, NESS CITY
 INGHAM JR MD,H LAIRD, LAWRENCE
 INGRAM MD,JOHN E, KANSAS CITY
 INNES MD,ROBERT C, SHAWNEE MISSION
 IRBY MD,PRATT, FORT SCOTT
 IRWIN MD,RICHARD L, NEWTON
 IRWIN MD,SHERYL A, NEWTON
 ISAAC MD,CHARLES A, NEWTON
 ISAAC,STEVEN R, WICHITA
 ISAACS MD,JUANITA J, WICHITA
 ISAACSON MD,RICHARD N, TOPEKA
 ISERN MD,HENRY J, KANSAS CITY
 ISNARD, DONNA M, SHAWNEE MISSION
 IWAY MD,BELINDA D, ELKHART
 IWAY MD,OLIVIA N, ELKHART

J

JABEL MD,JUVENAL T, SATANTA
 JACKMAN MD,KAREN J, WICHITA
 JACKSON JR MD,DONALD H, TOPEKA
 JACKSON MD,CHARLES R, WICHITA
 JACKSON MD,MICHAEL D, GARDEN CITY
 JACKSON MD,ROBERT V, SHAWNEE MISSION
 JACKSON MD,VICTOR L, ALTAMONT
 JACKSON,MICHAEL R, KANSAS CITY
 JACKSON,ROBERT, KANSAS CITY,MO
 JACOB MD,KANNAMPALLY L, WICHITA
 JACOBS MD,DAVID S, KANSAS CITY
 JACOBSON,ERIC, KANSAS CITY
 JACOBY II MD,ROBERT E, TOPEKA

JAHOV MD,KISHOR B, WICHITA
 JAHANIAN MD,DAVID, KANSAS CITY
 JAMES MD, DONALD L, WICHITA
 JAMES MD,PHILIP C, WICHITA
 JAMES MD,DONALD R, SHAWNEE MISSION
 JANSSEN MD,ERWIN T, TOPEKA
 JANTZEN MD,SARAH M, WICHITA
 JARROTT MD,JOHN B, HUTCHINSON
 JATA,MARY A, KANSAS CITY
 JAYARAM MD,MARANDAPALLI R, KANSAS CITY
 JEHAN MD,SAYED S, WICHITA
 JENNEY MD,CHARLES B, WICHITA
 JENSEN JR MD,JOHN T, WICHITA
 JENSEN MD,DARAN L, WICHITA
 JENSEN MD,ROBERT D, TOPEKA
 JENSEN MD,THOMAS M, DLTATHE
 JERKOVICH MD,GEORGE S, SALINA
 JESTER MD,SHELBY L, WICHITA
 JETER MD,JOHN, SALINA
 JETTE MD,N TIMOTHY, TOPEKA
 JEWELL MD,WILLIAM R, KANSAS CITY
 JOACHIMS,BRIAN V, KANSAS CITY
 JOCHES MD,GREGORY E, WICHITA
 JOHNSON MD,CAROL ANN, WICHITA
 JOHNSON MD,CAROLYN K, WICHITA
 JOHNSON MD,DANIEL G, KANSAS CITY
 JOHNSON MD,DAVID B, WICHITA
 JOHNSON MD,DAVID B, KANSAS CITY
 JOHNSON MD,GEORGE K, WICHITA
 JOHNSON MD,HOWELL D, OODGE CITY
 JOHNSON MD,J RICHARD, MCPHERSON
 JOHNSON MD,JOHN E, SHAWNEE MISSION
 JOHNSON MD,LINDA M, SHAWNEE MISSION
 JOHNSON MD,MATTHEW S, WICHITA
 JOHNSON MD,NADINE, SHAWNEE MISSION
 JOHNSON MD,PAMELA MCKENZIE, SHAWNEE MISSION
 JOHNSON MD,PAUL D, LEAVENWORTH
 JOHNSON MD,PERRY J, KANSAS CITY
 JOHNSON MD,PHILIP L, WICHITA
 JOHNSON MD,SCOTT S, WICHITA
 JOHNSON MD,TERESA F, WINFIELD
 JOHNSON MD,TERESA K, WICHITA
 JOHNSON MD,THOMAS E, WICHITA
 JOHNSON,BRIAN A, KANSAS CITY
 JOHNSON,DARRY S, WICHITA
 JOHNSTON MD,SARAH C, WICHITA
 JOHNSTON,VINCENT B, SHAWNEE MISSION
 JONES O O,ROBERT W, GREAT BEND
 JONES JR MD,HERMAN H, KANSAS CITY
 JONES MD,CHARLES E, SHAWNEE MISSION
 JONES MD,CLIFTON C, TOPEKA
 JONES MD,DAVID B, LARNOE
 JONES MD,EDWARD L, GREAT BEND
 JONES MD,H IVOR, SHAWNEE MISSION
 JONES MD,H PENFIELD, LAWRENCE
 JONES MD,JAY S, WICHITA
 JONES MD,JOHN K, WICHITA
 JONES MD,MICHAEL P, ATCHISON
 JONES MD,ROONEY, WICHITA
 JONES MD,WILLIAM T, MANHATTAN
 JONES,DAVID K, KANSAS CITY,MO
 JOSEPH JR MD,JAMES, WICHITA
 JOSEPH MD,BRIAN W, TOPEKA
 JOSEPH MD,HOWARD F, LAWRENCE
 JOSS MD,CHARLES S, TOPEKA
 JOST MD,GARY O, WICHITA
 JOYCE MD,G BERNARD, TOPEKA
 JUBAY JR MD,FELIPE L, LEOTI
 JUBELT MD,HILBERT P, MANHATTAN
 JUDD,KATHLEEN M, SHAWNEE MISSION
 JUOILLA JR MD,FRANCISCO, WICHITA
 JUSTUS MD,WILLIAM J, PLEASANTON

K

KADER MD,GIHAN S, WICHITA
 KADISON MD,HERBERT I, WICHITA
 KAHN MD,DAVID M, WICHITA
 KALIN MD,CINOI A, SHAWNEE MISSION
 KALIVAS MD,JAMES, KANSAS CITY
 KALIVAS MD,LINDA L, SHAWNEE MISSION
 KANE JR MD,WILLIAM M, HAYS
 KARDATZKE MD,DAVID S, WICHITA
 KARDATZKE MD,E STANLEY, WICHITA
 KAROATZKE MD,JOHN K, WICHITA
 KARLIN MD,CHARLES A, SHAWNEE MISSION
 KASHA MD,ROBERT L, WICHITA
 KASHYAP MD,BANSHI PRASAD, SHAWNEE MISSION
 KASPER,MICHAEL L, KANSAS CITY,MO
 KASSEBAUM MD,GLEN E, EL DORADO
 KASSEBAUM MD,KENNETH G, WICHITA
 KATER MD,ERIC O, WICHITA
 KATZ MD,ARNOLD L, SHAWNEE MISSION
 KATZ MD,FRED S, SHAWNEE MISSION
 KATZ MD,JEROME B, TOPEKA
 KAUSER MD,CURTIS D, KANSAS CITY
 KAUFFMAN,KURT A, KANSAS CITY
 KAUFMAN MD,EUGENE E, WICHITA
 KAUFMAN MD,LELAND R, WINFIELD
 KAUFMAN MD,WILLARD E, MOUNORIDGE
 KAUFMAN,LEONARD, KANSAS CITY
 KAUL MD,ANANO M, WINFIELD
 KAVEL MD,KARL K, TOPEKA
 KEARNS MD,NORBERT W, TOPEKA

*Probationary members.

KEELER MD,BRADFD RD, KANSAS CITY,MO
KEEVER,CRAIG E, SHAWNEE MISSION
KEISERMAN MD,WAYNE M, DODGE CITY
KEITH MD, REX B., WICHITA
KELLER MD,JAMES P, WICHITA
KELLERMAN MD,RICK, SALINA
KELLEY MD,CHRISTINE L, WICHITA
KELLEY MD,GORDON R, SHAWNEE MISSION
KELLY D D,MARK A, PLAINVILLE
KELLY MD,A CHRISTINE, HAYS
KELLY MD,DAN A, TOPEKA
KELLY MD,MICHELE, SHAWNEE MISSION
KENAGY MD,ROBERT S, WICHITA
KENDALL MD,TOM E, WICHITA
KENDRICK MD,J GILLERAN, WICHITA
KENNALLY MD,KEVIN P, SABETHA
KENNEDY MD,FREDERICK R, DLATHE
KENNEDY MD,GERALD T, WICHITA
KENNEDY MD,L ELAINE, LAWRENCE
KENNEDY MD,MICHAEL L, SHAWNEE MISSION
KENNING MD,GERALD F, HUTCHINSON
KENNY MD,LAURA M, SHAWNEE MISSION
KEPES MD,JOHN J, KANSAS CITY
KERBY,GWENDOLYN S, KANSAS CITY
KERR MD,GERALD F, FORT SCOTT
KETCHUM MD,LYNN D, SHAWNEE MISSION
KETTER MD,IVAN C, SIDUX CITY,IA
KETTERMAN MD,DIANA K, WICHITA
KEYES MD,MICHAEL J, WICHITA
KEYS JR MD,ROBERT C, TOPEKA
KHARE MD,PRATIBHA, KANSAS CITY
KHICHA MD,GYANCHAND J, WICHITA
KHOURY MD,GEORGE H, WICHITA
KHOURY,DANIEL J, KANSAS CITY
KIFER MD,C JAMES, HAYS
KIHM MD,ALBERT A, CHANUTE
KILE,KAY A, KANSAS CITY
KILPATRICK MD,CHARLES H, CARTHAGE,TX
KIM MD,JOHN M, KANSAS CITY
KIM MD,PAIK N, WICHITA
KIM MD,YONG W, TOPEKA
KIMBALL MD,RICHARD R, MANKATO
KIMMEL MD,KENNETH K, HALSTEAD
KIMMELL MD,RICHARD A, BAXTER SPRINGS
KIMPLE MD,KRIS G, WICHITA
KINDLING MD,PAUL H, TOPEKA
KINDRED MD,LYNN H, KANSAS CITY,MO
KINDSCHER MD,JAMES D, KANSAS CITY
KING D D,DAVID, CHANUTE
KING MD,BRADLEY S, WICHITA
KING MD,CHARLES R, KANSAS CITY
KING MD,WILLIAM T, GREAT BEND
KINPDRTS SR MD,EDWARD B, KANSAS CITY,MO
KIRCHNER MD,FERNANDO R, TUCSON,AZ
KIRK JR MD,E DAVID, WICHITA
KIRK MD,THOMAS E, MANHATTAN
KIRKEGAARD MD,RODGER S, TOPEKA
KIRSCH MD,MARK A, WICHITA
KISER MD,JOHN L, WICHITA
KISER MD,WILLARD J, WICHITA
KISHORE MD,SHEELA, PARSONS
KITCHEN MD,ROBERT R, WICHITA
KITCHENS,TAMMY L, KANSAS CITY,MO
KLAFTA MD,LEONARD A, WICHITA
KLEIN MD,TERRY D, WICHITA
KLEINHOLZ JR MD,EMIL JOHN, TOPEKA
KLEINSASSER MD,WARREN L, DLATHE
KLEM MD,STEPHEN A, KANSAS CITY
KLEMM MD,J MARTIN, KANSAS CITY,MO
KLEMMER MD,HERBERT, TOPEKA
KLEMDA JR MD,MARTIN B, BELDIT
KLIEWER MD,VERNON L, NEWTON
KLINGLER JR MD,EUGENE A, MANHATTAN
KLINGMAN MD,DIANE D, WICHITA
KLDBASA MD,CHARLES L, MANHATTAN
KLDNIS D D, DEMOSTHENIS, WICHITA
KLDSTER,DANIEL R, KANSAS CITY
KLDSTERHOFF MD,BRUCE E, HUTCHINSON
KLIZAK MD,THOMAS R, WICHITA
KNAPP MD,LESLIE E, WICHITA
KNAPP MD,M ROBERT, WICHITA
KNAPPENBERGER MD,KURT R, TOPEKA
KNAPPENBERGER MD,ROY C, MANITOU SPRING,CO
KNECHT MD,STEPHEN M, EMPORIA
KNEIB,TIMOTHY G, KANSAS CITY
KNEIDEL MD,THOMAS W, WICHITA
KNIGHT MD,LAURA C, WICHITA
KNIGHT MD,PHILIP J, WICHITA
KNIX MD,JEFFREY B, SALINA
KNIX,DOUGLAS B, SHAWNEE MISSION
KNUDSEN MD, DENNIS, LIBERAL
KNUDTSON,JOHN D, KANSAS CITY
KNUTH MD,KENNETH L, INDEPENDENCE
KOCH MD,KEVIN J, SHAWNEE MISSION
KODANAZ MD,A AYTEKIN, SHAWNEE MISSION
KDEHN MD,DANIEL J, INDEPENDENCE,MO
KDEHN MD,NORMAN S, WICHITA
KDELLIKER,LESLIE M, KANSAS CITY
KDHLEH MD,LINDA J, KANSAS CITY
KDHLEH,ULRIKE B, SHAWNEE MISSION
KDKSAL MD,TOM, GARDEN CITY
KDLSTE MD,REX J, COLBY
KDNIGSBERG JR MD,CHARLES, TOPEKA
KDDNS MD,JESS W, LIBERAL
KDDNTZ MD,JUDITH A, TOPEKA

KDDSER MD,JUDITH A, TOPEKA
KORBER,DAVID E, KANSAS CITY
KORDDNDWY MD,RAYMOND W, KANSAS CITY
KORTJE MD,DAVID K, WICHITA
KOSDY D D,ALLEN F, TOPEKA
KOSTER,KIM R, SHAWNEE MISSION
KOURI MD,SAMMY H, WICHITA
KOYAC MD,ANTHONY L, KANSAS CITY
KDYARIK MD,ERNEST D, TOPEKA
KOWALSKI MD,PETER C, TOPEKA
KOWALSKI MD,STEPHEN F, TOPEKA
KZIKOWSKI MD,BEN M, SHAWNEE MISSION
KRAKER MD,DAVID P, KANSAS CITY
KRANTZ MD,KERMIT E, KANSAS CITY
KRAUSE MD,ROLAND L, WICHITA
KREADY MD,JOHN L, WICHITA
KREHBIEL MD,MARK A, SALINA
KRESIE MD,RANDALL J, TOPEKA
KRETSINGER DD W BROCK, EMPORIA
KROLL MD,HARRY G, TOPEKA
KRUCKMYER MD,ALAN L, SALINA
KRUEGER MD,KURT ALLEN, SHAWNEE MISSION
KUBIN MD,DDRIS A, SHAWNEE MISSION
KUBINA MD,GLENN RICHARD, WICHITA
KUEBLER MD,KEVIN M, SHAWNEE MISSION
KUETHER,TDOD A, KANSAS CITY
KUHS MD,HENRY R, EL DORADO
KUMAR MD,RENU, EMPORIA
KUMAR MD,SURINDER, NEWTON
KURTH MD,C JOSEPH, WICHITA
KURTH MD,ROBERT H, SHAWNEE MISSION
KWAPISZESKI,BRADLEY R, KANSAS CITY
KWEI MD,SIDE T, KANSAS CITY
KYI MD,WIN M, DODGE CITY
KYNER MD,JOSEPH L, KANSAS CITY

L

LABHSETWAR MD,SUMEDHA A, JUNCTION CITY
LACCHED MD,MICHAEL L, TOPEKA
LAFENE MD,BENJAMIN W, MANHATTAN
LAHAM MD,ALEXANDER J, DALLAS,TX
LAI MD,CHUEN-HUEY, WICHITA
LAI MD,JENG Y, WICHITA
LAI MD,MAX G, TOPEKA
LAI,JOHN D, WICHITA
LAING MD,ROBERT R, KANSAS CITY
LAIRD MD,DALE D, DLATHE
LAMBERT,JACQI I, KANSAS CITY
LANCE JR MD,JOHN F, WICHITA
LANCE MD,RAYMOND W, PITTSBURG
LANDAUER,KYLE H, KANSAS CITY
LANG MD,CLAYTON A, TOPEKA
LAPI MD,RUTH M, SHAWNEE MISSION
LARREA,PABLO J, KANSAS CITY
LARSON MD,DANUTA DKTAWIEC, SHAWNEE MISSION
LARSON MD,DELBERT L, HIWATHA
LARSON,MELISSA L, SHAWNEE MISSION
LASH MD,RAY E, SHAWNEE MISSION
LASLEY MD,MICHAEL B, HAYS
LATIMER MD,KATHERINE, WICHITA
LAUDERT MD,SUSAN E, KANSAS CITY,MO
LAUNEY MD,WALTON S, TOPEKA
LAURY MD,DAVID G, SAVANNAH,GA
LAYA MD,CHIRUND, PARSONS
LAW MD,FINDLEY, ELLINWOOD
LAWHORN MD,CHARLTON D, KANSAS CITY
LAWLESS MD,HAROLD L, BLUE RAPIDS
LAWN MD,CLAUDIA A, WICHITA
LAWN MD,RAYMOND A, WICHITA
LAWRENCE MD,LINDA M, SALINA
LAWRENCE MD,MICHAEL K, SALINA
LAWS MD,LEWIS R, MARYSVILLE
LAWS,NANCY J, KANSAS CITY
LAWSON MD,DWIGHT, N NAPLES,FL
LAWWILL MD,THEODORE, KANSAS CITY
LAYBOURNE JR MD,PAUL C, LAKE PLACID,FL
LE MD,CHUDNG DUC, GARDEN CITY
LEAHY MD,JAMES D, SHAWNEE MISSION
LEAR MD,REX V, WICHITA
LEARNED MD,GEORGE R, LAWRENCE
LEE JR MD,EDWARD S, WICHITA
LEE MD, JAMES G, SHAWNEE MISSION
LEE MD,JAE M, KANSAS CITY
LEE MD,KYD R, KANSAS CITY
LEE MD,MARTIN W, WICHITA
LEE MD,R REX, WICHITA
LEE MD,SONG DOW, TOPEKA
LEE MD,SONG PING, TOPEKA
LEE MD,YONG U, EL DORADO
LEESON,MICHAEL C, SHAWNEE MISSION
LEFFLER MD,PAUL B, PITTSBURG
LEGASPI JR MD,PEDRO L, SHAWNEE MISSION
LEGER MD,LEE H, FT MYERS,FL
LEHR,CARRIE WOODS, KANSAS CITY
LEIFER MD,WILLIAM N, TOPEKA
LEISY MD,GERALD W, WICHITA
LEITCH MD,DAVID A, GARNETT
LEITNER MD,YORAM B, WICHITA
LEMKE MD,LUKE P, WICHITA
LEMDINE JR MD,ALBERT N, SHAWNEE MISSION
LEMDNS MD,STEPHEN F, ANDOVER
LENEVE MD,ROBERT T, PERKINS,OK
LENSKI JR MD,FRANCIS X, IDLA

LENTZ MD,WILLIAM R, TOPEKA
LED MD,WILLIAM A, SHAWNEE MISSION
LEPSE MD,PETER S, TOPEKA
LESKO MD,PAUL D, WICHITA
LESSENDEN JR MD,C M, TOPEKA
LESSER MD,DANE A, HUTCHINSON
LESTER MD,JOHN BUCKLES, SHAWNEE MISSION
LETURNEAU MD,EDWARD N, DMAHA,NE
LETTNER MD,HANS T, HUTCHINSON
LEVINE MD,ERROL, KANSAS CITY
LEVINE MD,WILLIAM R, WICHITA
LEVY MD,EDWIN Z, TOPEKA
LEWIN MD,WALTER, SHAWNEE MISSION
LIGHTY MD,DAN M, WICHITA
LIEBERMAN MD,BRUCE IRWIN, KANSAS CITY
LIES MD,RICHARD B, WICHITA
LIESMANN MD,GEORGE E, TOPEKA
LIESMANN MD,JEAN E, TOPEKA
LILLICH MD,MAUREEN A, COLUMBIA,MO
LIN MD,JOE J, WICHITA
LIND II MD,EDWARD J, GDDARD
LINDHOLM MD,DWIGHT L, WICHITA
LINDHOLM MD,GERALD R, NEWTON
LINDSLEY MD,CAROL B, KANSAS CITY
LINHARDT MD,RONALD D, WICHITA
LINN MD,KATHERINE P, KANSAS CITY
LIPSEY MD,JAMES H, SHAWNEE MISSION
LISTERMAN MD,JOHN C, TOPEKA
LITTELL MD,JAMES A, WICHITA
LIU MD,ALBERT T, KANSAS CITY
LIU MD,CHIEN, KANSAS CITY
LIU,PENNY, KANSAS CITY
LIVINGSTON D.D.,DOUGLAS R, WICHITA
LIVINGSTON MD,CHARLES E, SALINA
LLOYD MD,JOHN C, EMPORIA
LOCKE MD,MARLIN K, WAKEENEY
LOCKE,KELLY T, KANSAS CITY
LDEFFLER MD,JAMES A, WICHITA
LDEWEN MD,WILLIAM C, WICHITA
LOGAN MD,WILLIAM S, TOPEKA
LOGAN,ODDINA L, WICHITA
LOGANBILL MD,VARDEN J, MOUNDRIDGE
LOHNS JR MD,JOHN H, WICHITA
LOHRBERG MD,JOHN R, SHAWNEE MISSION
LONEY MD,PAUL D, CLARKSVILLE,IN
LONG MD,EDWARD E, HUMBOLDT
LONG MD,ROBERT C, NORTON
LOPEZ,MARK D, KANSAS CITY
LOPEZ,RUBEN J, KANSAS CITY
LORENZETTI,LISA A, KANSAS CITY
LORTZ MD,PHILIP W, WICHITA
LOSEE MD,JOHN M, WICHITA
LDTUACD MD,GAMALIEL G, SHAWNEE MISSION
LDVELAND MD,G CHARLES, LAWRENCE
LDVETT MD,PAUL A, WICHITA
LOW MD,HAROLD L, WICHITA
LOWE MD,STANLEY W, MANHATTAN
LUBETICH JR MD,JOHN F, SHAWNEE MISSION
LUCAS MD,GEORGE L, WICHITA
LUCKERDTH MD,LEAH L, WICHITA
LUOLDW MD,MICHAEL G, WICHITA
LUEKEN MD,LUEKE B, WICHITA
LUETJE MD,CHARLES MARION, KANSAS CITY,MO
LUI MD,NASON, TOPEKA
LUKERT MD,BARBARA P, KANSAS CITY
LULD MD,ANTONIO R, SHAWNEE MISSION
LUNA MD,ANTHONY D, BUCKLIN
LUNBERRY MD,JULIA J, WICHITA
LUND MD, STEPHEN B, SHAWNEE MISSION
LUNDAL,BRUCE E, KANSAS CITY
LUNDQUEST MD,DAVID E, HIWATHA
LUTZ MD,RICHARD E, WICHITA
LYGRISSE MD,DANIEL V, WICHITA
LYNCH MD,DARYL A, DODGE CITY
LYNCH MD,JOHN A, TOPEKA
LYNCH MD,MARY A, WICHITA
LYNCH,GREGORY P, KANSAS CITY
LYNE MD,ALAN W, ATCHISON
LYONS JR MD,FRANK C, MANHATTAN

M

MABEN MD,PAMELA S, CHANUTE
MAC KILLDP JR MD,DANIEL, WINFIELD
MACARIAN,FRANCIS A, SHAWNEE MISSION
MACARTHUR MD,RICHARD I, SHAWNEE MISSION
MACDUGALL MD,MARGARET L, SHAWNEE MISSION
MACE MD,RONALD D, JUNCTION CITY
MACE,RHONDA D, KANSAS CITY
MACFARLANE MD,DOUGLAS B, DLATHE
MACY MD,NORMAN E, SALINA
MACY MD,TEO L, SALINA
MADISON MD,WILLARD A, NORTONVILLE
MADRIGAL MD,MARILU, WICHITA
MADSEN MD,GLENN L, LAWRENCE
MAGEE MD,LAWRENCE M, LAWRENCE
MAGIDSON MD,ELLIOTT ARTHUR, WICHITA
MAGSALIN MD,RDMULD D, HAYSVILLE
MAILMAN MD,GERSHOM, WICHITA
MAINSTER MD,MARTIN A, KANSAS CITY
MALLORY MD,JOHN A, KANSAS CITY
MALONE MD,DAVID G, SHAWNEE MISSION
MALONE MD,EUGENE M, HALSTEAD

*Probationary members.

MANAHAN MO,G EUGENE, LAWRENCE
 MANASCO MO,RONALD R, WICHITA
 MANCINA MO,MICHAEL S J, SHAWNEE MISSION
 MANGELBAUM MD,MARK A, WICHITA
 MANGOLO MO,JOEL VOYCE, KANSAS CITY
 MANGUOGLU MD,ALI B, SALINA
 MANI MO,MANI M, KANSAS CITY
 MANN MD,JOHN B, HAYS
 MANNING MD,ROBERT T, WICHITA
 MANSOUR MO,BAOIE S, WICHITA
 MANSUR MO,LISA I, WICHITA
 MANTZ MD,FRANK A, SHAWNEE MISSION
 MARBACH MD,JAMES C, WICHITA
 MARCELL MO,GERALD W, LYNOON
 MARCHBANKS MO,ONALD L, SALINA
 MARPLES MO,BRADLEY W, TOPEKA
 MARPLES MO,OOUGLAS, OOOGE CITY
 MARQUETTE,RAY J, KANSAS CITY
 MARSH MO,CONNIE M, WICHITA
 MARSH MO,HENRY O, WICHITA
 MARSHALL MD,GEORGE W, SALINA
 MARSHALL MD,ROBERT J, GAROEN CITY
 MARSO,STEVE P, SHAWNEE MISSION
 MARTIN JR MO,GLEN E, WICHITA
 MARTIN MD,CLOYE V, FAIRFIELD,CA
 MARTIN MD,JOSEPH P, KANSAS CITY
 MARTIN MO,NORMAN L, KANSAS CITY
 MARTIN MO,OLIVER L, SALINA
 MARTIN MO,RONALD L, WICHITA
 MARTIN MD,WILLIAM O, TOPEKA
 MARTINAK MO,JOSEPH F, TOPEKA
 MARTINSON MO,EDWARD E, KANSAS CITY
 MARVEL MD,JAMES EBBERT, ARKANSAS CITY
 MASON MO,WAYNE E, INDEPENDENCE
 MASSIER,KIM M, SHAWNEE MISSION
 MASTERS MO,FRANCIS W, SHAWNEE MISSION
 MASTIO JR MD,GEORGE J, WICHITA
 MATASSARIN MO,BENJAMIN M, WICHITA
 MATASSARIN MD,FREDERICK W, WICHITA
 MATHEWS D O,THOMAS G, GARDEN CITY
 MATHEWS MD,OAVIO R, KANSAS CITY,MD
 MATHEWS MD,ROBERT MAJOR, SHAWNEE MISSION
 MATHEWSON MD,HUGH S, KANSAS CITY
 MATLOCK MO,MARK S, HUTCHINSON
 MATTHEW MO,WILLIAM L, OLATHE
 MATTHEW,BRIAN, KANSAS CITY
 MATTHEWS O.O.,GEORGE E, GARDEN CITY
 MATTHEWS MO,EARL H, SALINA
 MATTICK MD,IRVIN H, HAYS
 MATTIOLI MO,LEONE, KANSAS CITY
 MATZEN MO,TEO A, WICHITA
 MAUCK MO,HAROLO C, STOCKTON
 MAURICIO MO,OENNY G, WICHITA
 MAYEC MD,JAMES A, KANSAS CITY
 MAWDSLEY MD,MICHAEL W, WICHITA
 MAXFIELD MO,RUSSELL J, COLORADO SPRINGS,CO
 MAXWELL MD,GORDON E, SALINA
 MAXWELL MD,ROBERT A, SHAWNEE MISSION
 MAY MO,KENNETH L, BONNER SPRINGS
 MAY,LANCE A, KANSAS CITY
 MAYS,KEVIN P, SHAWNEE MISSION
 MC FARLAND MD,GRETA S, CHANUTE
 MCALLASTER MO,WENOALE E, GREAT BEND
 MCANELY MD,ROBERT D, KANSAS CITY
 MCATEE,JAMES R, KANSAS CITY
 MCBOYLE MO,MARILEE, WICHITA
 MCCANN MO,PATRICK E, FORT SCOTT
 MCCANN MD,WILLIAM E, OLATHE
 MCCARTER MO,OUANE K, TOPEKA
 MCCARTHY MO,AILEEN C, TOPEKA
 MCCARTHY MO,ROBERT P, KANSAS CITY
 MCCAUGHEY MD,HUGH W, SHAWNEE MISSION
 MCCAULEY,ROBERT L, KANSAS CITY
 MCCLANAHAN MO,WARD A, WICHITA
 MCCLELLAN MO,ERNEST L, WICHITA
 MCCOLLUM MO,WILLIAM B, LEAVENWORTH
 MCCOMAS JR MO,MARMAOUKE D, TOPEKA
 MCCORMICK MO,EUGENE CARL, WELLINGTON
 MCCOWEN MO,HERBERT M, SHAWNEE MISSION
 MCCOWN MO,ROBERT B, WICHITA
 MCCOY MO,C PATRICK, WICHITA
 MCCOY MO,CHARLES P, WICHITA
 MCCOY MO,CHARLES T, HUTCHINSON
 MCCOY MO,MICHAEL T, TOPEKA
 MCCRAE MO,SPENCER C, SALINA
 MCCUNE MO,MARK A, SHAWNEE MISSION
 MCCONNEL MO,R JAMES, PITTSBURG
 MCCONALD MO,KEVIN R, HAYS
 MCCONALD MO,THOMAS L, HAYS
 MCCONOUGH MO,W OAVIO, WICHITA
 MCEACHEN MO,WILLIAM H, SHAWNEE MISSION
 MCELHINNEY MO,CHARLES F, OOOGE CITY
 MCELROY MO,ROBERT T, TOPEKA
 MCELROY MO,WILBUR J, CNTRL AFRICAN REPUB.
 MCGEENEY MO,TERRY L, SENECA
 MCGINNIS MO,MARILEE K, LAWRENCE
 MCGINNIS MO,MICHAEL O, WICHITA
 MCGOURA III MO,FRANCIS J, WICHITA
 MCGRATH MO,BARBARA A, SHAWNEE MISSION
 MCGUIRE MO,WILLIAM F, WICHITA
 MCGUIRE,CHARLES W, WICHITA
 MCINNIS MO,OALTON B, WICHITA
 MCKENNA MO,MICHAEL J, FORT SCOTT
 MCKERRACHER MO,ROBERT O, OERBY
 MCKINNEY O.O.,SHARON L, TOPEKA

MCKITTRICK MO,RICHARD, SHAWNEE MISSION
 MCLAIN MO,KENNETH, RANSOM
 MCMASTER MO,JOHN F, WICHITA
 MCMILLAN MO,JOHN H, KANSAS CITY
 MCMILLAN MD,JON M, OOOGE CITY
 MCMULLEN MO,BRUCE R, WICHITA
 MCMULLEN MO,JOSEPH E, HUTCHINSON
 MCNEIL MO,ELBERT O, MANHATTAN
 MCNICKLE MO,GEORGE A, WICHITA
 MCQUEEN MO,OAVIO ARNOLO, WICHITA
 MEAOR D O,RICHARD W, MEDICINE LODGE
 MEANS MO,MILA LEE, VALLEY CENTER
 MEBUST MO,WINSTON K, KANSAS CITY
 MEOLER MO,ROBERT G, WICHITA
 MEQUONA MO,LEO L, LINCOLN
 MEEK JR MO,JOSEPH C, WICHITA
 MEEKER II MO,BRUCE P, WICHITA
 MEEKS, MARK A, KANSAS CITY
 MEGIBOW MD,ALAN D, ST JOSEPH,MO
 MEIDINGER MO,RAY, HIAWATHA
 MEIDINGER MO,RICHARD, TOPEKA
 MEIER MO,MITCHELL S, WICHITA
 MEIER MD,PATRICIA A, FAIRFIELD,CA
 MEIER,MICHAEL M, KANSAS CITY
 MELEAN MO,JAIME, WICHITA
 MELHAM MO,THOMAS J, WICHITA
 MELHORN MO,J MARK, WICHITA
 MELHORN MO,KATHERINE J, WICHITA
 MELIN MD,BRUCE O, GAROEN CITY
 MENAKER MO,JEROME S, WICHITA
 MENDIOLA MO,AMBROSIO P, PITTSBURG
 MENOIONES MO,L MARLENE, WICHITA
 MENOLICK MO,R MICHAEL, OLATHE
 MENEHAN MO,H JAMES, WICHITA
 MENGEL MO,CHARLES E, LEAVENWORTH
 MENKING MO,F W MAWFREO, WICHITA
 MENKING MO,SUSAN MARGARET, WICHITA
 MENNINGER MD,BRENT O, KANSAS CITY
 MENNINGER MO,ROBERT G, TOPEKA
 MENNINGER MD,ROY W, TOPEKA
 MENNINGER MO,W WALTER, TOPEKA
 MENON MO,REMA, PARSONS
 MENZEL MO,THOMAS E, SENECA
 MERCAOER MO,MARIO S, WICHITA
 MEREOTH MD,W TOM, WICHITA
 MERKEL MO,EARL O, RUSSELL
 MERRIFIELD MO,TERRY S, WICHITA
 MERRITT MO,W HENRY, LEAVENWORTH
 MERRITT,GREGORY A, SHAWNEE MISSION
 MERSHON MO,JAMES C, WICHITA
 MESROPIAN MO,GEORGE D, ATCHISON
 MESSAMORE MO,OEBA L, WICHITA
 MESSNER MD,STAN A, WICHITA
 MEYER MO,MARK C, KANSAS CITY
 MEYER MO,O WARREN, TOPEKA
 MEYER MO,WARREN E, WICHITA
 MEYER,ANGELA M, KANSAS CITY
 MEYERS MO,STEPHEN, GAROEN CITY
 MHATRE MO,VIJAY R, TOPEKA
 MICHELBAACH MO,ALBERT P, WICHITA
 MIGLIAZZO MO,CARL V, SHAWNEE MISSION
 MIGUELINO MO,DLIVER M, EMPORIA
 MIH MO,ALEXANDER, CHANUTE
 MILES,WILLIAM S, SHAWNEE MISSION
 MILFELD MO,DOUGLAS J, WICHITA
 MILLER D O,STEPHEN A, COFFEYVILLE
 MILLER MO,DAVID PATERSON, WICHITA
 MILLER MO,DEAN M, PARSONS
 MILLER MO,OENNIS W, KANSAS CITY
 MILLER MO,ODN E, WICHITA
 MILLER MO,EARL E, PITTSBURG
 MILLER MO,ELDEN V, SALINA
 MILLER MO,FRANKLIN R, WINFIELD
 MILLER MO,FREEMAN LANCE, SHAWNEE MISSION
 MILLER MO,HERBERT C, NORFORD,CT
 MILLER MO,KEVIN E, WICHITA
 MILLER MO,PHILIP, ANTHONY
 MILLER MO,ROBERT E, GAROEN CITY
 MILLER MO,ROGER M, WICHITA
 MILLER MO,STEPHEN FRANCIS, PARSONS
 MILLER MD,TOOD A, WICHITA
 MILLIGAN MO,ONALD B, KANSAS CITY
 MILLS JR MO,PHILIP E, TOPEKA
 MILLS MO,CHARLES O, WICHITA
 MILLS MO,CRAIG G, KANSAS CITY
 MILLS MO,KIRK C, YORK,PA
 MILLS MD,PHILIP R, WICHITA
 MILLS MO,STEPHEN C, HUTCHINSON
 MILLS MO,VERNON A, LEAVENWORTH
 MIMIAGA,ANNE T, OLATHE
 MINGES MO,TIMOTHY J, WESTMORELAND
 MINGLE MD,RALPH R, SHAWNEE MISSION
 MINNS MO,GAROLO O, WICHITA
 MIRANOA MO,JOSEPH R, WICHITA
 MISASI D O,ROGER P, JOPLINA,MO
 MISKE MO,STEPHAINE A, TOPEKA
 MISKEW MD,ODN B W, SHAWNEE MISSION
 MITCHELL MO,ALEX C, LAWRENCE
 MITCHELL MO,SUE M, KANSAS CITY,MO
 MOORELL MO,CAROL A, LAWRENCE
 MOELL MO,ELLEN M, SHAWNEE MISSION
 MODLIN MO,HERBERT C, TOPEKA
 MOELLER MO,CHRISTOPHER A, WICHITA
 MOELLER MO,DONALD O, KANSAS CITY
 HOFFAT MO,ROBERT E, SHAWNEE MISSION
 MOHLER MO,JACK M, ABILENE
 MOLOS MD,MARK A, KANSAS CITY
 MONSOUR MO,JAMES W, PRATT
 MONTERO JR MO,CARLOS, KANSAS CITY

MONTGOMERY MO,MICHAEL L, EMPORIA
 MONTGOMERY MO,SCOTT A, KANSAS CITY,MO
 MONTGOMERY MO,THOMAS ALLEN, SABETHA
 MONTGOMERYSHORT MD,RUTH G, WICHITA
 MOORE IV MO,JOHN B, OLATHE
 MOORE MD,DENNIS F, WICHITA
 MOORE MO,JAMES E, NEWTON
 MOORE MO,ROBERT, HOISINGTON
 MOORE MD,ROBERT F, CANEY
 MOORE MO,WAYNE V, KANSAS CITY
 MOORHEAD JR MO,F ALLEN, NEOOESHA
 MORALES JR,OSCAR, KANSAS CITY
 MORAN MO,JON FREDERICK, KANSAS CITY
 MOREANO,PHILLIP A., KANSAS CITY
 MORFFI MO,RAUL R, KANSAS CITY
 MORGAN II MO,DAVIO LLOYD, OLATHE
 MORGAN III MO,LOUIS S, WICHITA
 MORGAN MO,DICK A, WICHITA
 MORGAN MO,JAMES I, WICHITA
 MORGAN MO,MITCH A, WICHITA
 MORGAN MO,RANDALL J, WICHITA
 MORGAN MO,SCOTT, NEWTON
 MORITZ MO,RICK S, SHAWNEE MISSION
 MORONEY MD,JEAN M, SHAWNEE MISSION
 MORRIS MD,MERLE D, TOPEKA
 MORRIS,JENNIFER A, KANSAS CITY
 MORRISON MO,IRA R, ATCHISON
 MORRISON MD,MICHAEL R, TOPEKA
 MORRISON MO,RICHARD L, WICHITA
 MORROW MO,THOMAS F, WICHITA
 MORTON MD,ROBERT A, ARKANSAS CITY
 MOSER MO,SCOTT E, WICHITA
 MOSIER MO,KEVIN M, PARSONS
 MOSIER MO,STANLEY JAY, WICHITA
 MOSSINGHOFF,OEBOHAR GRIESER, SHAWNEE MISSION
 MOWERY MO,WILLIAM E, SALINA
 MOWRY MO,GERALD L, MANHATTAN
 MROZ MO,MARY K, WICHITA
 MUEHLBERGER MO,JAMES J, SHAWNEE MISSION
 MUELLER MO,ARNOLD V, TOPEKA
 MUELLER MD,J KENT, SHAWNEE MISSION
 MUELLER MO,MICHAEL A, WICHITA
 MUETH COUPLAND MD,JOAN O, WICHITA
 MUILENBURG,JEFFREY, KANSAS CITY
 MULLER MO,SAMUEL B, PITTSBURG
 MULLIGAN,LINDA L, SHAWNEE MISSION
 MULLINIX MO,JANICE M, WICHITA
 MULLINS MD,JOHN R, WICHITA
 MUNDEN MD,FRANK A, SHAWNEE MISSION
 MURFITT MO,MALCOLM C, LINDSBORG
 MURPHY MO,BARRY L, WICHITA
 MURPHY MO,OUANE A, WICHITA
 MURPHY MD,JAY W, SHAWNEE MISSION
 MURPHY MO,MICHAEL, TOPEKA
 MURPHY MO,PATRICK L, WICHITA
 MURPHY MO,PAUL M, WICHITA
 MURPHY MO,PAUL W, WICHITA
 MURPHY MO,WILLIAM R, SHAWNEE MISSION
 MURPHY MO,WILLIAM R C, WICHITA
 MURPHY,TRACY O, KANSAS CITY
 MURRAY MO,JANE L, KANSAS CITY
 MURRAY MD,KENT B, WICHITA
 MURRAY MO,W LEE, SHAWNEE MISSION
 MURROW MO,RICHARD W, WICHITA
 MUSE MO,ROGER K, OAYTON,OH
 MYERS IV MO,PERCY C, TOPEKA
 MYERS JR MO,EARL B, INDEPENDENCE
 MYERS MO,ONALD L, CONCORDIA
 MYERS MO,JO ANN, TOPEKA
 MYERS MO,W EUGENE, IOLA
 MYRICK MO,MICKEY C, HAYS
 MYRICK MO,STEPHEN W, LAWRENCE

N

NABOURS MO,RICHARD O, TOPEKA
 NACHTIGALL MO,ANREW, NEWTON
 NAGARAJU MO,ARRAMRAJU, EMPORIA
 NALOOZA JR MO,FAUSTINO M, WELLINGTON
 NAMNUM MO,PETER A, KANSAS CITY
 NANNEY MO,GREGORY O, HUTCHINSON
 NARCISO MO,VICENTE O, ABILENE
 NASH MO,CYNTHIA I, WICHITA
 NASH MO,ROBERT A, SHAWNEE MISSION
 NASSERI,KEVIN K, KANSAS CITY
 NATHAN MO,WILLIAM A, TOPEKA
 NAUER MO,PAULA LOU, SHAWNEE MISSION
 NAVICKAS MO,LEONARD A, SHAWNEE MISSION
 NAZARIO MD,LILLIANA E, SHAWNEE MISSION
 NEARY MO,JANE M, SHAWNEE MISSION
 NEFF MO,DOUG STEVENS, HUMBOLOT
 NEFF MO,JAMES R, KANSAS CITY
 NEHORAYAN,MARC L, KANSAS CITY
 NEIBURGER MO,JAMES B, SHAWNEE MISSION
 NEIGHBOR MO,ERNEST H, SHAWNEE MISSION
 NEIGHBOR MO,GAYLORO P, SHAWNEE MISSION
 NEIL MO,ROY N, HAYS
 NEIS MO,PAUL R, SALINA
 NELLIS MO,STEPHANIE F, WICHITA
 NELSON JR MO,GUST H, WICHITA
 NELSON MO,BRYAN C, SHAWNEE MISSION
 NELSON MO,CHARLES G, OOOGE CITY
 NELSON MO,DOUGLAS LEROY, SALINA
 NELSON MO,GERALD O, WICHITA

*Probationary members.

NELSON MD,JOHN B, KANSAS CITY
 NELSON MD,MARIAN K, SALINA
 NELSON MD,RICHARD D, LAWRENCE
 NELSON MD,RUSSELL ALAN, WICHITA
 NELSON MD,T EUGENE, FORT SCOTT
 NELSON,TAMMIE L, OLATHE
 NESMITH MD,LESLIE W, WICHITA
 NETHERTON MD,DAVID W, WICHITA
 NEUBAUER MD,MARCUS A, SHAWNEE MISSION
 NEUENSCHWANDER MD,JOHN, HOXIE
 NEUENSCHWANDER MD,JOHN RANO, HOXIE
 NEUER MD,FREDERICK S, EMPORIA
 NEUHAUS,JOHN P, KANSAS CITY
 NEUMANN MD,JAMES W, SALINA
 NEVINS MD,RICHARD L, LIBERAL
 NEWBY MD,JAMES P, WICHITA
 NEWCOMB MD,WARD M, HAYS
 NEWMAN MD,CLIFFORD B, PITTSBURG
 NEWMAN MD,MARK A, WICHITA
 NEWSOM MD,F CARTER, WICHITA
 NIBBELINK MD,LARRY WAYNE, KANSAS CITY
 NICE MD,G WILLIAM, TOPEKA
 NICHOLS MD,JON C, SHAWNEE MISSION
 NICHOLS MD,ROBERT R, FORT SCOTT
 NICKELL MD,WENDELL K, SALINA
 NIEDEREE MD,DAVID W, OERBY
 NIELSEN MD,MARY L, WICHITA
 NIEMAN MD,JOHN L, SHAWNEE MISSION
 NIENSTOOT MD,JOHN F, SUN CITY,AZ
 NIGH MD,STEPHEN S, SHAWNEE MISSION
 NIGHTENGAL MD,OLIANE D, EL DORADO
 NIKNIA MD,MORTEZA, GAROHER
 NISLY MD,JANA L, WICHITA
 NIXON MD,JAMES E, DODGE CITY
 NIXON MD,RICHARD R, SALINA
 NIXON MD,WILLIAM A, WICHITA
 NOBLE MD,MARK J, KANSAS CITY
 NDLA,BOUNSAVATH, KANSAS CITY
 NDLLA MD,LORIANE B, WICHITA
 NDORDHOEK MD,LYLE J, HAYS
 NORRIS MD,CHARLEY W, KANSAS CITY
 NORRIS MD,ROBERT P, WICHITA
 NORTH MD,DDRIS G, WICHITA
 NDRTH MD,MARGARET JOHNSON, HUTCHINSON
 NORTHWAY MD,DANIEL P, TOPEKA
 NORTON MD,KENNETH A, SHAWNEE MISSION
 NORTON MD,ROBERT K, WICHITA
 NOSTI MD,JUAN C, SHAWNEE MISSION
 NOTHNAGEL MD,ARNOLD F, SHAWNEE MISSION
 NDVOTNY MD,PETER C, TOPEKA
 NULL MD,WILLIAM G, SALINA
 NUNEMAKER MD,MARION E, HUTCHINSON
 NUNLEY,PIERCE D, KANSAS CITY,MO
 NYBERG MD,FREDRIK F, TOWANDA
 NYE MD,C ERIK, SHAWNEE MISSION

OWEN III MD,JAMES W, TOPEKA
 OWEN MD,LARUE W, WICHITA
 OWEN MD,PERE A, WICHITA
 OWENS JR MD,WILLIAM S, SHAWNEE MISSION
 OWENS MD,DAVID B, SHAWNEE MISSION
 OXLEY JR MD,JOHN EDWARD, SHAWNEE MISSION
 OXLEY MD,DWIGHT K, WICHITA

P

PADILLA MD,CARDL E, TOPEKA
 PAGE MD,RUTH, WICHITA
 PAI MD,RADHA V, PARSONS
 PAI MD,VARADARAJ S, PARSONS
 PALAGANAS-TOSCO MD,AMANDA C, MCLDUTH
 PALKO MD,WILLIAM M, WICHITA
 PALMBERG MD,KENT E, TOPEKA
 PALMER MD,DAVID L, WICHITA
 PALMER MD,GERALD K, SALINA
 PALMER MD,H C, LIBERAL
 PALMER MD,MARVIN M, LEAVENWORTH
 PALTAN JR MD,JOSE D, WICHITA
 PANKOW MD,KIMBERLY J, WICHITA
 PANKOW MD,LARRY M, WICHITA
 PAPP JR MD,S DEAN, PITTSBURG
 PARANJOTHI MD,SUBRAMONIAM P, PARSONS
 PARDO MD,LILLIAN G, KANSAS CITY
 PAROD MD,MANUEL P, KANSAS CITY
 PAREKH MD,AJITKUMAR M, KANSAS CITY
 PAREKH MD,MADHAVI A, KANSAS CITY
 PARHAM MD,VERDON W, CHANUTE
 PARKER MD,HARDLD L, WICHITA
 PARKER MD,JULIE J, TOPEKA
 PARKS MD,JON C, WICHITA
 PARMAN MD,CRAIG R, WICHITA
 PARMAN MD,ROBERT O, TOPEKA
 PARRA MD,DANIEL C, KANSAS CITY
 PARRA MD,MIGUEL D, KANSAS CITY
 PARRIS MD,ROGER D, FORT SCOTT
 PARRISH JR,DAVID L, SHAWNEE MISSION
 PARSA,MICHAEL B, WICHITA
 PARS I MD,MANUTCHEHR, PITTSBURG
 PASCUA MD,PERCIVAL G, TOPEKA
 PASSMAN MD,STEVEN M, WICHITA
 PASTOR MD,VICTOR HUGO, EMPORIA
 PATEL MD,VINOD, TOPEKA
 PATRICK MD,FRED EDWARD, TOPEKA
 PATRON MD,RICARDO A, LIBERAL
 PATRON MD,RICARDO F, KANSAS CITY
 PATRON,ROBERT R, KANSAS CITY
 PATTERSON MD,JOHN R, SHAWNEE MISSION
 PATTERSON MD,MICHAEL S, HUTCHINSON
 PATTON MD,J MICHAEL, WICHITA
 PAULS MD,DANIEL N, PARSONS
 PAULS MD,DAVID G, WICHITA
 PAULS MD,SCOTT W, KANSAS CITY
 PAULY MD,TIMOTHY R, PRATT
 PAXTON MD,EDWARD SCOTT, WICHITA
 PAY MD,NORMAN T, WICHITA
 PAYNE MD,J RALPH, KANSAS CITY,MO
 PAYNE MD,ROBERT R, TOPEKA
 PAZELL MD,JOHN A, SHAWNEE MISSION
 PEARCE MD,EUGENE W J, SHAWNEE MISSION
 PEARCE MD,LUNETTA M, SHAWNEE MISSION
 PEASE MD,GARY L, HUTCHINSON
 PECK MD,ROGER, GREAT BEND
 PEDERSON MD,ARNOLD M, PLAINVILLE
 PEDRAZA MD,HERNANDEZ, WELLINGTON
 PEERY MD,WILLIAM H, WICHITA
 PEES MD,GERALD B, APOLLO BEACH,FL
 PEFELY MD,ELMER O, CHETOPA
 PEIL MD,MICHAEL L, WICHITA
 PELLETIER JR MD,LAWRENCE L, WICHITA
 PENCE MD,CHARLES D, WICHITA
 PENNER MD,STEVEN D, WICHITA
 PENNER MD,TIMOTHY M, CLAY CENTER
 PENNINGTON MD,KATHERINE, WICHITA
 PENNINGTON MD,PHILIP A, KANSAS CITY
 PENTECOST MD,RICHARD L, SHAWNEE MISSION
 PENZLER MD,CINDY E, TOPEKA
 PERALES MD,MERCEDES, WICHITA
 PERQUE II MD,W LANG, TOPEKA
 PEREIRA MD,WILLY G, ARKANSAS CITY
 PEREZ-TAMAYO MD,CLAUDIO A, SALINA
 PERIDD MD,DOMINADOR T, ELKHART
 PERKINS MD,JACK L, HUTCHINSON
 PERNDLL MD,MARTIN L, KANSAS CITY
 PERRY JR MD,LAWRENCE L, KANSAS CITY
 PERSONS MD,DIANE L, KANSAS CITY,MO
 PETELIN MD,JOSEPH B, SHAWNEE MISSION
 PETERIE MD,JERRY D, WICHITA
 PETERS MD,THOMAS J, WICHITA
 PETERS MD,TIMOTHY R, WICHITA
 PETERSEN MD,GERALD D, SHAWNEE MISSION
 PETERSEN,MARK I, BONNER SPRING
 PETERSON O D, PEGGY S, MANHATTAN
 PETERSON JR MD,EVAN A, WATHENA
 PETERSON JR MD,JACK T, MANHATTAN
 PETERSON MD,DEAN L, TOPEKA
 PETERSON MD,JACK T, MANHATTAN
 PETERSON MD,JAMES E, SALINA
 PETERSON MD,ROBERT L, TOPEKA
 PETERSON MD,STEPHEN E, TOPEKA

PETERSON MD,VERNON J, TOPEKA
 PETRIK MD,EOWIN L, TOPEKA
 PETTAVEL,PAUL P, SHAWNEE MISSION
 PETTERSON MD,CECIL E, SYRACUSE
 PETTERSON MD,OENNIS CRAIG, TOPEKA
 PETTERSON MD,O'RUTH S, RIDGEVILLE,IN
 PETTJOHN MD,WALTER J, GUADALAJARA JALISCO,MX
 PFEIFER II,F MICHAEL, KANSAS CITY
 PFEIFFER,BRIAN D, KANSAS CITY
 PFUETZE MD,BRUCE L, SHAWNEE MISSION
 PFUETZE MD,ROBERT E, TOPEKA
 PHELPS MD,DAVID WAYNE, FORT SCOTT
 PHILIPP MD,JOSEPH THEODORE, MANHATTAN
 PHILLIPS MD,DENNIS G, WICHITA
 PHILLIPS MD,WARREN G, SHAWNEE MISSION
 PHIPPS MD,CARLA B, LAWRENCE
 PHIPPS MD,JACK G, WICHITA
 PIBURN MD,MARVIN F, WICHITA
 PICARD MD,THOMAS H, TOPEKA
 PICKERT MD,CURTIS B, WICHITA
 PIERCE MD,CHARLES F, TOPEKA
 PIERCE MD,ONALD R, TOPEKA
 PIERCE MD,GEORGE E, KANSAS CITY
 PIERSON MD,MARK E, EMPORIA
 PIERSON MD,WEIR, MCPHERSON
 PILCHARD MD,WILLIAM A, SHAWNEE MISSION
 PINKHAM MD,CHRIS M, KANSAS CITY,MO
 PINSKER MD,JACOB A, WICHITA
 PIPPIN MD,LYNNE K, SHAWNEE MISSION
 PITTS MD,RONALD L, SHAWNEE MISSION
 PLACEK MD,DEBRA C, LAWRENCE
 PLAVAC MD,THOMAS, WICHITA
 PLUMB MD,RENNE L, KANSAS CITY
 PODREBARAC MD,FRANCIS A, WICHITA
 PODREBARAC,PIERRE, KANSAS CITY
 POEHLMANN MD,KURT S, KINSLEY
 POGSDN MD,GEORGE W, PITTSBURG
 POKORNY MD,JOHN C, CINCINNATI,OH
 POLASEK MD,CARLA L, TOPEKA
 POLINER MD,LAWRENCE R, WICHITA
 POLING MD,TERRY L, WICHITA
 POLLACK MD,SIMON, PORTLAND,OR
 POLLMAN MD,STANLEY E, WICHITA
 POLLDOCK MD,ANTHONY G A, WICHITA
 POLLY MD,RICHARD E, TOPEKA
 POLSON MD,ROBERT C, GREAT BEND
 PODLE MD,BERNARD T, WICHITA
 POONAWALA MD,HUSENI, KANSAS CITY,MO
 PORTER MD,MICHAEL G, LOWELL,MI
 PORTER MD,ROBERT D, TOPEKA
 PORTER MD,SCOTT W, WICHITA
 PORTO JR MD,ANTHONY F, SHAWNEE MISSION
 POTTER MD,ROBERT L, KANSAS CITY
 PUDLOSE MD,ANIL K, LEAVENWORTH
 PDLTON MD,THOMAS J, TOPEKA
 POWELL II MD,BENSON M, TOPEKA
 POWELL MD,CAROL W, SHAWNEE MISSION
 POWELL MD,KENNETH A, SHAWNEE MISSION
 POWELL MD,WILLIAM R, TOPEKA
 POWERS MD,G ROBERT, KANSAS CITY
 PDERS MD,HAROLD W, SUN CITY,AZ
 POWERS MD,K DEAN, WICHITA
 PRAEGER MD,MARK A, LAWRENCE
 PREMSINGH MD,NALINI G, KANSAS CITY
 PRENDES MD,CARLOS A, SHAWNEE MISSION
 PRENTISS MD,HAROLD, NEWTON
 PRESCOTT,JAMES T, WICHITA
 PRESKORN MD,SHELDON H, WICHITA
 PRESTON MD,DAVID F, KANSAS CITY
 PRESTON MD,RALPH R, TOPEKA
 PRESTON MD,RICHARD, GREAT BEND
 PRETZ MD,JAMES B, KANSAS CITY
 PRICE JR MD,LAURANCE W, TOPEKA
 PRICE MD,JAMES GORDON, KANSAS CITY
 PRICE MD,PETER G, WINFIELD
 PRICE MD,VAUGHAN C, MCPHERSON
 PRIETO MD,JORGE N, KANSAS CITY
 PRDKOP MD,BRAOFFORD S, TOPEKA
 PRDNKO MD,MICHAEL J, SHAWNEE MISSION
 PROSSER MD,ROBERT L, KANSAS CITY
 PRDUO MD,G ONEIL, SHAWNEE MISSION
 PUGH MD,DAVID M, KANSAS CITY
 PULLMAN MD,NORMAN K, FAIRFIELD BAY,AR
 PURINTON MD,LEW W, WICHITA
 PURKIS,MICHAEL D, KANSAS CITY
 PUTNAM MD,LYLE B, WICHITA

Q

QAMAR MD,YUSUF, NEWTON
 QASIM MD,YASMIN F, WICHITA
 QUIGLEY MD,JAMES, SHAWNEE MISSION
 QUIJANO JR MD,AMON S, STAFFORD
 QUINN MD,CHARLES E, KANSAS CITY
 QUINN MD,JOHN MICHAEL, SHAWNEE MISSION
 QUINONES MD,ELADIO A, TAMPA,FL

R

RABE MD,MELVIN A, LEAVENWORTH
 RADDUM MD,SANFORD B, FORT SCOTT

O

O'BOYNICK II MD,PAUL LEONARD, KANSAS CITY
 O'BRYAN MD,JAMES J, SHAWNEE MISSION
 O'CALLAGHAN MD,WILLIAM K, TOPEKA
 O'DELL MD,MICHAEL L, KANSAS CITY
 O'DONNELL JR MD,LEONARD A, WICHITA
 O'DONNELL MD,HARRY E, JUNCTION CITY
 O'DONNELL MD,JANET E, SCOTTSDALE,AZ
 O'NEAL MD,LYNN W, LAWRENCE
 O'NEIL MD,ROBERT H, TOPEKA
 O'NEILL MD,ERIC F, WICHITA
 OBOURN MD,ROBERT L, TOPEKA
 OCHSNER MD,BRUCE B, WICHITA
 ODENHEIMER MD,BURTRAM J, WICHITA
 ODGERS MD,RODNEY K, PITTSBURG
 ODOM MD,DANIEL G, HAYS
 OEHME MD,STEPHEN F, FAYETTEVILLE,NC
 OELSCHLAGER MD,RONALD D, LAWRENCE
 OHMAN MD,RICHARD J, DODGE CITY
 OHMART MD,RICHARD V, OAKLEY
 OLD MD,JERRY L, ARKANSAS CITY
 OLIVE JR MD,ROBERT J, WICHITA
 OLMSTEAD MD,CALVIN G, WICHITA
 OLNEY MD,ROBERT D, MANHATTAN
 OLSEN MD,PHILLIP S, EL DORADO
 OLSEN MD,TIMOTHY W, KANSAS CITY
 OLSON MD, NANCY Y, KANSAS CITY
 OLSON MD,DAN E, WICHITA
 OLSON MD,ERWIN T, NEWTON
 OLSON MD,THOMAS H, SHAWNEE MISSION
 OLSON,INGER L, WICHITA
 OPENSHAW MD,CALVIN R, HUTCHINSON
 ORCHARD MD,RICHARD A, LAWRENCE
 ORTH-BALMAN MD,DIANE M, WICHITA
 ORTH,GREGORY, WICHITA
 OSBERN MD,LIDA, LAWRENCE
 OSBORNE MD,CONRAD C, WICHITA
 OSIO MD,ANTONIO L, WICHITA
 OSDBA MD,WILLIAM G, WICHITA
 OSTER MD,JOYCE A, WICHITA
 OTERO-CAGIDE MD,MANUEL R, WICHITA
 OTTINGER MD,CHRISTOPHER M, SHAWNEE MISSION
 OUANO JR MD,BIBIANO B, WICHITA

*Probationary members.

RADOVANDY MO, RAOMILA, WICHITA
 RAGHAVAN MO, PARULA P, WICHITA
 RAGHAVAN MO, PRAKASH V, WICHITA
 RAINBOW-EARHART MO, KATHRYN A, TOPEKA
 RAINS, JEFFREY, KANSAS CITY
 RAJEWSKI MO, RICHARD L, HAYS
 RAJU MO, A S PAOMA, TOPEKA
 RALSTIN MO, JAMES H, KANSAS CITY
 RAMANNA MO, MAGENORA, WICHITA
 RAMIREZ MO, AUGUSTO H, PITTSBURG
 RAMIREZ MO, IRENE P, PITTSBURG
 RAMSAY MO, GRACE A, TOPEKA
 RAMSEY MO, BARTLETT W, TOPEKA
 RAMSEY MO, JOE A, HAYS
 RANOALL MO, GEDRGE R, WICHITA
 RANDALL MO, GORDON R, TOPEKA
 RANOALL MO, JEFFREY C, GAINSVILLE, FL
 RANKIN, KRISTIN, KANSAS CITY
 RANSOELL MU, EOGAR C, TOPEKA
 RANSOM MO, JAMES H, TOPEKA
 RANSOM, WILLARD B, OTTAWA
 RATLIFF II O D, DEAN W, TOPEKA
 RAUSCH MO, MICHAEL A, LINCOLN, NE
 RAWCLIFFE JR MO, ROBERT A, WICHITA
 RAZEK MO, HANA A, WICHITA
 RAZEK MO, ZACK A, WICHITA
 REAO MO, WILLIAM T, CDFFEYVILLE
 READER MO, G WHITNEY, WICHITA
 REALS MO, WILLIAM J, WICHITA
 REAZIN MO, WALTER L, WICHITA
 RECKLING MO, FREDERICK W, KANSAS CITY
 REOOI MO, RAGHUNATH P, WICHITA
 REDDY MO, B N, HILL CITY
 REDDY MO, BEENA M, WICHITA
 REDDY MO, P JAGANNADHA, HILL CITY
 REDDY MO, SATTI S, DODGE CITY
 REDDY MO, VENUMBAKA C, EL OORADO
 REDFORO MO, JOHN W B, KANSAS CITY
 REOMON DO, MARY L, KANSAS CITY
 REEB MO, RONALD JDSEPH, KANSAS CITY
 REECE MO, A THOMEN, GARONER
 REECE MO, RICHARD J, SALINA
 REEO JR MO, WILLIAM D, SHAWNEE MISSION
 REED MO, A J, WICHITA
 REED MO, O CRAMER, WICHITA
 REED MO, DAVID O, WICHITA
 REED MO, JAMES S, LAWRENCE
 REED MO, RALPH R, LAWRENCE
 REED MO, WILLIAM RANOALL, WICHITA
 REESE MO, JACK D, LIBERAL
 REESE MO, JOHN L, LAWRENCE
 REEVES MO, C STEWART, FORT SCOTT
 REGEHR, RANOALL S, SHAWNEE MISSION
 REGISTER JR MO, G ASHLEY, WICHITA
 REICHENBERGER MO, RONALD J, WICHITA
 REINHART-WULF MO, TAISSIA L, GARDEN PLAIN
 REINKING MO, VICTOR E, TOPEKA
 REISMAN MO, MICHAEL ALAN, WICHITA
 REISWIG MO, GARY W, WICHITA
 REISWIG MO, JEFFREY S, WICHITA
 REIVICH MO, RONALD S, SHAWNEE MISSION
 RELIHAN MO, OONALO A, WICHITA
 REMPEL MO, JOHN H, WICHITA
 RENNER MO, PATRICK A, SHAWNEE MISSION
 REPLOGLE MO, CHARLES B, GREAT BEND
 RETTELE, GARRICK A, KANSAS CITY
 REUSSER MO, LAYNE M, WICHITA
 REYES JR MO, FRANCISCO A, OTTAWA
 REYMOND MO, RALPH D, TOPEKA
 REYNOLDS MO, TERESA A, WICHITA
 RHOADS MO, ANNE C, OLATHE
 RHOADS MO, JAMES P, TOPEKA
 RHOADS MO, JEFFREY P, TOPEKA
 RHOOE, MICHAEL G, WICHITA
 RHODEN MO, CURTIS H, WICHITA
 RHODES MO, IVAN E, WICHITA
 RHODES MO, JAMES B, KANSAS CITY
 RHODES MO, LDWELL M, WICHITA
 RICCI MO, ROBERT LAWLER, TOPEKA
 RICE JR MO, FREDERICK A, KANSAS CITY
 RICE MO, BERNARD F, SHAWNEE MISSION
 RICE MO, RANDALL B, VALLEY CENTER
 RICHARDS MO, OALLAS LEE, HAYS
 RICHARDS MO, JON F, SALINA
 RICHARDSOON II O D, LESTER E, SHAWNEE MISSION
 RICHARDSOON MO, GEORGE A, KANSAS CITY
 RICHARDSOON MO, JAY L, SHAWNEE MISSION
 RICHARDSOON MO, JOHN GARY, WICHITA
 RICHTER MO, DON G, SHAWNEE MISSION
 RICK JR MO, GREGORY G, SHAWNEE MISSION
 RICK MO, GREGORY A, WICHITA
 RICKETTS-KINGFISHER MO, DAVID J, TOPEKA
 RIEG MO, KEVIN P, WICHITA
 RIEGER MO, ERNEST H, WICHITA
 RIEKHOF MO, PAUL L, SHAWNEE MISSION
 RIFFEL MO, LAWRENCE O, SHAWNEE MISSION
 RILEY MO, RAY B, KANSAS CITY
 RINDT MO, PHILLIP L, FREODNIA
 RIDROAN MO, HUGH O, WICHITA
 RIORDAN MO, TERRANCE, LAWRENCE
 RISENHODDYER, EDOIE D, SHAWNEE MISSION
 RISING MO, JESSE D, KANSAS CITY
 RIZZA MO, ROBERT G, HALSTEAD
 RDACH MO, BARBARA L, COLUMBIA, MO
 ROACH MO, NEIL E, WICHITA

ROAN MO, YEAI, WICHITA
 ROBERTS D.O., ROGER W, WICHITA
 ROBERTS MO, DANIEL K, WICHITA
 ROBERTS MO, RICHARD S, LAWRENCE
 ROBERTS MO, SHELTON O, GARDEN CITY
 ROBERTS MO, WARREN E, TOPEKA
 ROBERTSON MO, EDWARD J, SHAWNEE MISSION
 ROBERTSDN MO, JOSEPH K, WICHITA
 ROBINSON MO, DAVID B, TOPEKA
 ROBINSON MO, OAVID W, SHAWNEE MISSION
 ROBINSON MO, EOGAR L, BELLA VISTA, AR
 ROBINSDN MO, G OONALO, WICHITA
 ROBINSON MO, JOHN D, SHAWNEE MISSION
 ROBINSDN MO, RALPH G, KANSAS CITY
 ROBINSON MO, ROBERT H, WICHITA
 ROBL MO, OAVID A, WICHITA
 RODERICK MO, JAMES E, SALINA
 RODRIGUEZ MO, ALBERTO, TOPEKA
 RODRIGUEZ MO, PAUL L, GARON CITY
 RODRIGUEZ TOCKER MO, LILIA, WICHITA
 ROEOER MO, ROBERT E, TOPEKA
 ROMALIS MO, BRIAN E, WICHITA
 ROMEISER MO, REX S, SALINA
 ROMEREIM, MARK E, WICHITA
 ROMERO JR, FRANK, KANSAS CITY
 ROMITO MO, CYNTHIA L, SHAWNEE MISSION
 ROMONOO MO, STEVEN A, OLATHE
 ROKK MO, LEE E, KANSAS CITY
 ROOS MO, MAUREEN, WICHITA
 RORABAUGH MO, DONALD C, ABILENE
 ROSADO, ANTONIO, KANSAS CITY
 ROSALES MO, J EDGAR, SALINA
 ROSE MO, OONALO L, BELLA VISTA, AR
 ROSE MO, SHELBY O, WICHITA
 ROSEN MO, CARL H, PRATT
 ROSEN MO, OAVID, WICHITA
 ROSEN MO, DONALD E, TOPEKA
 ROSENBERG MO, ALLAN J, KANSAS CITY
 ROSENBERG MO, STANTON L, SHAWNEE MISSION
 ROSENBERG MO, THOMAS F, WICHITA
 ROSENTHAL MO, STANTON J, KANSAS CITY
 ROSS MO, OAVIO K, ARKANSAS CITY
 ROSS MO, DENNIS LEE, WICHITA
 ROSS MO, JACK L, TOPEKA
 ROTERT MO, LARRY, TOPEKA
 ROTH MO, ALAN E, KANSAS CITY
 ROTHSTEIN MO, TERRY B, PARSONS
 ROUNOS EXEC SEC, HARRIET, SHAWNEE MISSION
 ROWLETT MO, JACK G, PAOLA
 ROY MO, WILLIAM R, TOPEKA
 RUBIN MO, HERBERT M, SHAWNEE MISSION
 RUBLE JR MO, JAMES L, OVERBROOK
 RUBLE MO, REBECCA A, KANSAS CITY
 RUCKER, MARK R, KANSAS CITY
 RUHLEN MO, JAMES L, OLATHE
 RUIZ MO, CARLOS M, GREAT BEND
 RUMISEK MO, JOHN O, WICHITA
 RUNOQUIST MO, BETH, LAWRENCE
 RUNNELS MO, JOHN B, PALO ALTO, CA
 RUPP MO, JAMES C, SHAWNEE MISSION
 RUPP MO, JENNIFER A, WICHITA
 RUPP MO, RICHARD J, TOPEKA
 RUSSELL MO, PHILIP W, WICHITA
 RUTH MO, WILLIAM E, KANSAS CITY
 RUTNGAMLUG MO, LUECHA, HAYS
 RUZICKA MO, LAWRENCE J, CONCORDIA
 RYAN O O, PHILIP A, HOLTEN
 RYAN JR MO, RAYMONO J, WICHITA
 RYAN MO, JOHN M, MARYSVILLE
 RYAN MO, MICHAEL E, SHAWNEE MISSION
 RYAN MO, SHERRY L, RAYTOWN, MO
 RYMER MO, ROBERT A, SHAWNEE MISSION
 RYSER MO, CAROL A, KANSAS CITY, MO

S

SABIN JR MO, GEORGE M, WICHITA
 SABDOOR MO, SYEO A, WICHITA
 SACHDEVA MO, REKHA, ODDGE CITY
 SACK MO, JOSEPH M, WICHITA
 SADIQ MO, SULEMAN, WICHITA
 SADLER MO, PATRICK C, MINNEAPOLIS, MN
 SAFFD MO, KARL S, SHAWNEE MISSION
 SAMUEL MO, CHANOC C, WINFIELD
 SANCHEZ MO, JOSE J, WICHITA
 SANCHEZ MO, RDGELID, TOPEKA
 SANOERS MO, J ALAN, LAWRENCE
 SANDERS MO, JAMES E, KANSAS CITY
 SANONESS MO, KATHLEEN M, KANSAS CITY
 SANTOS MO, FERMIN M, KANSAS CITY
 SANTOS MO, JOAQUIN G, WICHITA
 SANTOSCOY MO, GILBERT S, WICHITA
 SARGENT MO, JOSEPH D, TOPEKA
 SATHYANARAYANA MO, SARASWATHI, SHAWNEE MISSION
 SATYA-MURTI MO, SATYA, PARSONS
 SAWKAR MO, LAXMI OAS A, SHAWNEE MISSION
 SAXER MO, JOHN J, SHAWNEE MISSION
 SAYLOR MO, EDWARD H, TOPEKA
 SAYLOR MO, LESLIE L, TOPEKA
 SAYLOR MO, MARK, TOPEKA
 SAYLOR MO, RANOL L, HUTCHINSON
 SAYLOR MO, STEPHEN, TOPEKA
 SCAMMAN MO, W WIKKE, TOPEKA

SCANLAN MO, TIMOTHY M, WICHITA
 SCANLAN, MARK R, WICHITA
 SCANLON JR MO, JAMES H, HAOOAM, CT
 SCHAEFER MO, JOSEPH PETER, SHAWNEE MISSION
 SCHAPER MO, OANIEL C, OLATHE
 SCHEFFER, RUSSELL E, KANSAS CITY, MO
 SCHEINBERG MO, KENNETH, WICHITA
 SCHELLINGER MO, RICHARD P, EMPORIA
 SCHILTZ MO, FRANCES, LA GRANGE, IL
 SCHLACHTER MO, ERNEST R, WICHITA
 SCHLAGECK MO, JOSEPH G, WICHITA
 SCHLEMMER MO, ROGER B, PITTSBURG
 SCHLICHER MO, JOHN E, WICHITA
 SCHLICHTER MO, KIMBERLY A, SHAWNEE MISSION
 SCHLOERB MO, PAUL R, KANSAS CITY
 SCHLOESSER MO, ANNE C, TOPEKA
 SCHLOESSER MO, HARVEY L, TOPEKA
 SCHLOESSER MO, PATRICIA T, TOPEKA
 SCHLOESSER MO, PETER E, TOPEKA
 SCHLOZMAN MO, OANIEL L, KANSAS CITY, MO
 SCHLUETER MO, JOHN J, WICHITA
 SCHMEIOLER MO, OAVID ALLEN, ARKANSAS CITY
 SCHMIOT MO, HERBERT R, NEWTON
 SCHMIOT MO, MARTY L, WICHITA
 SCHMIOT MO, MICHAEL J, TOPEKA
 SCHMIOT MO, RAMON WARNER, SALINA
 SCHNEIOER MO, SCOTT A, WICHITA
 SCHNEIOER MO, SETH A, WICHITA
 SCHNELLE MO, JOACHIM, WICHITA
 SCHNOEBELN MO, RENE E, KINSLEY
 SCHOOELING MO, RICK O, ARKANSAS CITY
 SCHOPF MO, CLIFTON C, WICHITA
 SCHOWENGEROT MO, ANOREW W, KANSAS CITY
 SCHOWENGEROT MO, OANIEL B, WICHITA
 SCHRAM MO, PETER CHARLES, TOPEKA
 SCHREFFER MO, ROSEMARY, SHAWNEE MISSION
 SCHROEDER MO, SYONEY O, LAWRENCE
 SCHROEDER, GRACE, NEWTON KS
 SCHROFF MO, GREGORY P, KANSAS CITY
 SCHROLL MO, JOHN T, SHAWNEE MISSION
 SCHUETZ MO, PERRY N, GREAT BEND
 SCHUKMAN MO, JAY S, GREAT BEND
 SCHULZ, THOMAS K, WICHITA
 SCHWARTING MO, J STEVEN, ABILENE
 SCHWARTZ MO, EUGENE W, DODGE CITY
 SCHWARTZ MO, V DEAN, WICHITA
 SCHWEGLER MO, RAYMONO A, LAWRENCE
 SCHWEGLER MO, RAYMONO A, KANSAS CITY
 SCHWERTFEGER KELS, OEBRA J, KANSAS CITY
 SCHWERTFEGER MO, TY L, WICHITA
 SCHWDRM MO, CURTIS P, KANSAS CITY
 SCJAR MO, WILLIAM C, SHAWNEE MISSION
 SCOTT MO, ALEX, JUNCTION CITY
 SCOTT MO, CHESTER E, SALINA
 SCOTT MO, DUANE, BELLEVILLE
 SCOTT MO, WILLIAM H, WICHITA
 SCOTTEN, MITZI S, SHAWNEE MISSION
 SEAMAN MO, LAUREN T, OLATHE
 SEARIGHT MO, LDWELL R, HIAWATHA
 SEARLE MO, ROBERT E, PITTSBURG
 SEATON MO, ROBERT O, SALINA
 SEEBREE MO, STEVEN G, SALINA
 SEEBER, AMY O, KANSAS CITY
 SEGBRECHT MO, STEPHEN L, LAWRENCE
 SEGIE MO, F RONALO, PITTSBURG
 SEGRAVES MO, STEVEN D, SHAWNEE MISSION
 SEGUIN MO, JOHN H, KANSAS CITY
 SEHDEV MO, JOAN, TOPEKA
 SEHOEV, PAUL S, KANSAS CITY
 SEIBEL, BRENT E, KANSAS CITY
 SEIOEL MO, DONALD R, ALBUQUERQUE, NM
 SEITZ JR MO, JOSEPH E, ELLSWORTH
 SEITZ, RICHARD F, KANSAS CITY
 SELIGSDON, MICHAEL S, SHAWNEE MISSION
 SEN SARMA MO, PRDNAB K, WICHITA
 SETTLE JR MO, RUSSELL D, SHAWNEE MISSION
 SETTLE SR MO, RUSSELL D, TOPEKA
 SEVIER MO, SAMUEL M, MUSKOGEE, OK
 SHAAD MO, OODROTHY J, SHAWNEE MISSION
 SHAFFER MO, JAMES J, SALINA
 SHAFFER MO, PRESTON J, WICHITA
 SHAFFER MO, KATHLEEN BRAY, SHAWNEE MISSION
 SHAH MO, ASHOK H, WINFIELD
 SHAH MO, MIAN, LARNEO
 SHAH MO, MUKHTAR H, WICHITA
 SHAH MO, NASREEN, LARNED
 SHAH MO, SHARFUDOIN, HALSTEAD
 SHAH, ARJAV A, KANSAS CITY, MO
 SHAPIRO MO, WILLIAM M, WICHITA
 SHARMA MO, ARUN L, PARSONS
 SHARMA MO, S A, SHAWNEE MISSION
 SHARP, CHAD E, WICHITA
 SHAW MO, JAMES W, HUTCHINSON
 SHAW MO, JOSEPH L, TOPEKA
 SHAW MO, PAMELA K, KANSAS CITY
 SHAW MO, RICHARD C, WICHITA
 SHAW, JOHN W, KANSAS CITY
 SHEAFOR MO, DOUGLAS, TOPEKA
 SHEARS MO, ROBERT N, HUTCHINSON
 SHEEHY MO, PATRICK G, TOPEKA
 SHEERN MO, MARK DOUGLAS, ABILENE
 SHEFFER MO, KEITH O, OLATHE
 SHEFFIELD MO, MICHAEL A, MANHATTAN
 SHELL MO, JOHN R, KANSAS CITY, MO
 SHELLITO MO, JOHN G, WICHITA
 SHELLITO MO, JOHN L, WICHITA
 SHELTON MO, STEPHEN E, TOPEKA
 SHEPPARD MO, ROBERT G, SMITH CENTER
 SHERARO MO, SARAH L, SHAWNEE MISSION

*Probationary members.

SHERBDN MD,MARY LOU, WICHITA
 SHERIDAN MD,KIM M, SALINA
 SHERIDAN MD,RANDY M, SHAWNEE MISSION
 SHERWOOD JR MD,CLARENCE E, TOPEKA
 SHEU MO,W ERIC, TOPEKA
 SHIELD MD,CHARLES, WICHITA
 SHIELDS JR MD,JAMES M, EL DORADO
 SHIELDS MD,THOMAS M, MANHATTAN
 SHIPPEY MD,DEAN U, WINFIELD
 SHIREMAN MD,PETER K, KANSAS CITY
 SHIVEL MD,OAVID G, GREAT BEND
 SHIVELY MD,ROBERT M, ELLINWOOD
 SHOFFNER MD,RICHARD W, WICHITA
 SHOFSTALL MD,WILLIAM H, SHAWNEE MISSION
 SHORT MD,BRUCE HERSCHEL, SHAWNEE MISSION
 SHRADER MD,C ERIC, WICHITA
 SHRADER MD,DOYLE A, WICHITA
 SHRIWSE MD,TOM L, ATCHISON
 SHULL DD,MICHAEL W, GARDEN CITY
 SHURTZ MD,GLEN L, WICHITA
 SHUTT MD,CHARLES B, LAWRENCE
 SIEG MD,KARL G, SHAWNEE MISSION
 SIEGLE MD,LORA A, COUNCIL GROVE
 SIEMENS MD,CHARLOTTE A, WICHITA
 SIEMENS MD,RICHARD A, LYONS
 SIFERS MD,TIMOTHY M, SHAWNEE MISSION
 SILER MD,EUGENE T, HAYS
 SILER,JAMES, WICHITA
 SILLS MD,CHARLES T, NEWTON
 SILLS MD,THOMAS D, KANSAS CITY
 SILVER MD,BRAD J, SHAWNEE MISSION
 SIMMONS MD,ROBERT EARLE, NEWTON
 SIMMONS,MARK S, SHAWNEE MISSION
 SIMMONS,MICHAEL R, SHAWNEE MISSION
 SIMMS MD,OAVID ALAN, WICHITA
 SIMON MD,JOYCE L, KANSAS CITY
 SIMON MD,STEVEN M, SHAWNEE MISSION
 SIMONE MD,JOSEPH N, SHAWNEE MISSION
 SIMONY-SCDLOFSKY MD,M ANN, SHAWNEE MISSION
 SIMPSON MD,ROBERT LIMBAUGH, OBERLIN
 SIMPSON MD,TOM C, STERLING
 SIMPSON MD,WILLIAM S, TOPEKA
 SIMS MD,PETER MORRIS, TOPEKA
 SINCLAIR MD,RICHARD H, SHAWNEE MISSION
 SINGH MD,GIRVAR, ARKANSAS CITY
 SINGH,RAHUL P, KANSAS CITY
 SINN,KRISTINA J, WICHITA
 SINNING MD,GARY, HIAWATHA
 SISK MD,PHILLIP B, TOPEKA
 SIWEK MD,CHRISTOPHER W, EL DORADO
 SKAER MD,STANLEY ALLEN, EUREKA
 SKIBBA MD,RICHARD M, WICHITA
 SLAGLE,GENELLE J, SHAWNEE MISSION
 SLAMA MD,MICHAEL A, CON RAPIOS,MN
 SLAUGHTER ,JERRY, TOPEKA
 SLOO MD,MILD G, SALINA
 SLUTSKY MD,LAWRENCE JDEL, WICHITA
 SMITH D D, JAMES A M, WICHITA
 SMITH JR MD,FLOYD L, COLBY
 SMITH JR MD,WILLARD J, WICHITA
 SMITH MD,ALVIN L, WICHITA
 SMITH MD,AMY SCAMMAN, KANSAS CITY
 SMITH MD,BOYD E, SALINA
 SMITH MD,BRUCE G, ARKANSAS CITY
 SMITH MD,DALE C, ALBERT LEA,MN
 SMITH MD,DAVID E, SALINA
 SMITH MD,DDNOLD J, SHAWNEE MISSION
 SMITH MD,HAROLD R, SALINA
 SMITH MD,JDDH D, LARNED
 SMITH MD,JON A, SALINAS,CA
 SMITH MD,LINDALL E, WICHITA
 SMITH MD,MICHAEL L, WICHITA
 SMITH MD,MONT A, SHAWNEE MISSION
 SMITH MD,NEWTON C, ARKANSAS CITY
 SMITH MD,PERRY MILTON, GREAT BEND
 SMITH MD,THOMAS WILLIAM, HUTCHINSON
 SMITH MD,WILLIAM P, SHAWNEE MISSION
 SMITH,ANN IRVING K, OLAHE
 SMITH,JACQUELINE, SHAWNEE MISSION
 SNARR MD,JACK W, TOPEKA
 SNODELL MD,FIRMIN E, SHAWNEE MISSION
 SNDDK MD,ROBERT RUFUS, MCLOUTH
 SNOW JR MD,ARTHUR D, SHAWNEE MISSION
 SNOW MD,DDNOLD L, LEAVENWORTH
 SNOWBARGER MD,MARVIN D, EMPORIA
 SNYDER MD,GREGG M, WICHITA
 SNYDER MD,JULIE, ALBUQUERQUE,NM
 SNYDER MD,RICHARD H, OLAHE
 SNYDER MD,THOMAS E, KANSAS CITY
 SDELDNER MD,JAMES O, GRANOVIEW,MD
 SOLLO MD,DAVID G, WICHITA
 SOLOMON MD,HERMAN, WICHITA
 SOLTZ MD,ROBERT A, WICHITA
 SDMERS MD,MARVIN M, WICHITA
 SONGER MD,HERBERT L, ABILENE
 SONTHEIMER,DANIEL L, KANSAS CITY
 SOUCEK MD,CHARLES O, KANSAS CITY
 SPANGLER MD,HENRY E, TOPEKA
 SPANN MD,RICHARD W, WICHITA
 SPARKS MD,STEPHEN T, WICHITA
 SPEARMAN MD,JESSE L, LA MESA,CA
 SPEARS MD,CHESTER A, EMPORIA
 SPEED MD,JAMES, WICHITA
 SPEER MD,LELANO, KANSAS CITY

SPEER MD,LOUIS N, OTTAWA
 SPENCER MD,JOHN HAROLD, FORT SCOTT
 SPENCER MD,MILLARD C, TOPEKA
 SPENCER MD,WAYNE E, TOPEKA
 SPERRY MD,ROBERT E, KANSAS CITY
 SPIELDOCH,RISA L, KANSAS CITY
 SPRADLIN MD,MICHAEL L, CHESAPEAKE,VA
 SPRINGER MD,MARK J, WICHITA
 STACEY MD,KIMBALL, INDEPENDENCE
 STADALMAN MD,ROSS EUGENE, HAYS
 STAFFORD MD,ROBERT W, HUTCHINSON
 STAMPS MD,PHIL, WICHITA
 STANDLEE MD,TIM E, OLAHE
 STANLEY MD,KENNETH E, BIG SPRING,TX
 STANLEY MD,REX C, PAOLA
 STARK MD,JAMES R, WICHITA
 STARKEY MD,DAVID J, EVERETT,WA
 STARKEY MD,JERALD L, RUSSELL
 STASS-ISERN MD,MERRILL, KANSAS CITY
 STECH MD,JOSEPH M, ANDALE
 STECHSCHULTE MD,DANIEL J, KANSAS CITY
 STECKLEY MD,RICHARD ALLEN, WICHITA
 STEEGMANN MD,A THEODORE, CARMEL,IN
 STEELBERG MD,ELSIE, WICHITA
 STEELE MD,CLARENCE H, KANSAS CITY
 STEER MD,PHYLLIS L, KANSAS CITY
 STEEVES MD,JOHN H, EMPORIA
 STEHR MD,CHRISTIAN H, KANSAS CITY
 STEICHEN MD,EDWARD F, LENORA
 STEIN MD,JOSEPH M, TOPEKA
 STEIN MD,MATTHEW, LAWRENCE
 STEIN MD,PAUL S, WICHITA
 STEINBERGER MD,RICHARD E, WICHITA
 STEINZEIG MD,SHERMAN M, SHAWNEE MISSION
 STEMBRIDGE MD,TRAVIS H, WICHITA
 STEPHANZ JR MD,GERALD B, WICHITA
 STEPHENS DD,G MARCUS, MINNEDLA
 STEPHENS MD,CHARLES, MINNEOLA
 STEPHENS MD,SAMUEL T, MINEDLA
 STEPHENSON MD,LUCILLE C, ST FRANCIS
 STEVENS MD,WM. MICHAEL, WICHITA
 STEVENS MD,LEAH J, LEAVENWORTH
 STEVENS MD,LEADRED J, GARNETT
 STEVENS MD,PHILIP L, TONGANDXIE
 STEVENS MD,RONALD, NEWTON
 STEVENSON MD,E KENT, SHAWNEE MISSION
 STEWART MD,DANIEL L, WICHITA
 STEWART MD,TOM D, WICHITA
 STIGGE MD,KEYIN W, WICHITA
 STOCK MD,KARL W, TOPEKA
 STOCKTON D O,MICHAEL A, TOPEKA
 STOFER MD,BERT E, PEDRIA,AZ
 STOFFER MD,ROBERT P, HALSTEAD
 STONE MD,CHESTER W, EMPORIA
 STONE MD,G REX, MANHATTAN
 STONE MD,GRANT C, ATTICA
 STOSKOPF MD,LAWRENCE E, SALINA
 STOUT MD,JAMES M, HUTCHINSON
 STOUT MD,NILES M, LYNDON
 STREET MD,DAVID E, WICHITA
 STREIT MD,JEROME G, WICHITA
 STRICKLAND MD,JULIE L, KANSAS CITY
 STRICKLAND MD,M H VAN, WICHITA
 STRIEBINGER MD,CHARLES M, SHAWNEE MISSION
 STRINGFIELD MD,SCOTT L, LYONS
 STRUTZ MD,WILLIAM C, LEAVENWORTH
 STRYKER JR MD,HENRY B, CONCORDIA
 STUBBLEFIELD MD,CHARLES T, KANSAS CITY
 STUBBLEFIELD MD,JENNIFER L, KANSAS CITY
 STUBER MD,JACK L, SHAWNEE MISSION
 STUBLER MD,DANIEL K, HOUSTON,TX
 STUCKEY MD,CHARLES E, SHAWNEE MISSION
 STUCKY MD,DEAN E, MEDICINE LODGE
 STUMP MD,HARL G, HAYS
 STURGEDON MD,JOHN B, SHAWNEE MISSION
 STURGIS,CHARLES D, WICHITA
 STURICH MD,JORGE M, WINFIELD
 SUERO MD,JESUS T, WICHITA
 SUERO,JAMES A, KANSAS CITY
 SUFI MD,M ASHRAF, TOPEKA
 SUFI MD,KAISER A, TOPEKA
 SUGAR MD,ROBERT L, SHAWNEE MISSION
 SUITER MD,DANIEL JAY, PRATT
 SULLIVAN JR MD,HENRY B, SHAWNEE MISSION
 SULLIVAN MD,CORNELIUS J P, FISHKILL,NY
 SULLIVAN MD,LEONARD L, WICHITA
 SULLIVAN MD,TOM G, SHAWNEE MISSION
 SULLIVAN,JEANETTE, EASTON
 SUMNER MD,JOYCE R, HUTCHINSON
 SUMNER MD,MARION M, HUTCHINSON
 SUMNER MD,RALPH N, FREONIA
 SUMPTER,MATTHEW T, SHAWNEE MISSION
 SUNOBYE MD,KEVIN R, TOPEKA
 SUTTON JR MD,RICHARD L, SHAWNEE MISSION
 SUTTON MD,JEFFREY J, FT WORTH,TX
 SUTTON MD,ROBERT E, KANSAS CITY,MO
 SVOBODA MD,CHARLES R, CHAPMAN
 SVOBODA MD,LOIS V, WICHITA
 SVOBODA MD,WILLIAM B, WICHITA
 SWAN MD,MAJOR MARTIN, AUBURN,CA
 SWANN MD,CLAIR L, RUSSELL
 SWARTZ MD,MARSHA A, OKLAHOMA CITY,OK
 SWEENEY MD,CABOT L, WICHITA
 SWEET MD,ONNA E, WICHITA
 SWIFT,TIMOTHY J, KANSAS CITY
 SWIGGER JR MD,GLENN, TOPEKA

T

TACKETT MD,ROBERT J, WICHITA
 TAKERNA MD,CYRUS, TOPEKA
 TAKAHASHI MD,TETSDUR, TOPEKA
 TAKAHASHI,AYAME, KANSAS CITY
 TALBERT MD,TIMOTHY C, WICHITA
 TAN MD,ONALD C-S, WICHITA
 TAN MD,LOURDES R, HAYS
 TANANUNKUL MD,URAIWAN, PARSONS
 TANDOC JR MD,VALENTIN T, NEWTON
 TANG MD,CHANTRA, PARSONS
 TANG MD,SARDHO, PARSONS
 TAPPEN MD,DANIEL L, SCOTSDALE,AZ
 TARGOWNIK MD,KARL K, TOPEKA
 TARNOWER MD,WILLIAM, TOPEKA
 TARVER MD,STEPHEN O, WICHITA
 TARVIN MD,RANDY J, DNAGA
 TATPATI MD,DANIEL A, WICHITA
 TATPATI MD,OLGA ADELINA, WICHITA
 TAWADROS,HANAN K, KANSAS CITY
 TAWIL MD,ELIAS AOIB, PITTSBURG
 TAYIEM MD,A K, ATCHISON
 TAYLOR MD,BARBARA D, MANHATTAN
 TAYLOR MD,CATHY M, CHANUTE
 TAYLOR MD,ELMER W, SEAN
 TAYLOR MD,ELWYN J, HUTCHINSON
 TAYLOR MD,STEVEN L, WICHITA
 TAYLOR MD,THOMAS F, LENEXA
 TAYLOR MD,THOMAS L, SHAWNEE MISSION
 TAYLOR,BRAOLEY J, KANSAS CITY,MO
 TEARE MD,MAX E, GARDEN CITY
 TEETER MD,SCOTT M, TOPEKA
 TEJANO MD,NEONIL O, HALSTEAD
 TEMPERO MD,STEPHEN J, TOPEKA
 TEMPLETON MD,ARCH W, KANSAS CITY
 TENNY MD,ROBERT T, SHAWNEE MISSION
 TETZLAFF MD,ARCH O A, WEATHERBY LAKE,MO
 THAI,VINH Q, KANSAS CITY
 THAKDR MD,ONNIS S, WICHITA
 THALBLUM MD,HARVEY, KANSAS CITY,MO
 THELEN MD,J CHRISTINE, WICHITA
 THEROU MD,LEDNA F, KANSAS CITY
 THODE,JEFF L, KANSAS CITY
 THOMAS MD,OARYL L, WICHITA
 THOMAS MD,GREGORY MCQUEEN, MCPHERSON
 THOMAS MD,JAMES H, KANSAS CITY
 THOMAS MD,MARTY H, SHAWNEE MISSION
 THOMAS MD,THOMAS V, KANSAS CITY
 THOMAS,RYAN M, SHAWNEE MISSION
 THOMAS,STANLEY M, SHAWNEE MISSION
 THOMEN II MD,ROBERT K, CHANUTE
 THOMPSON MD,DANIEL M, WICHITA
 THOMPSON MD,ANNIE M, KANSAS CITY
 THOMPSON MD,MICHAEL F, SHAWNEE MISSION
 THOMPSON,CURT, KANSAS CITY
 THOMPSON,PH GORDON, WICHITA
 THOMS MD,NORMAN W, TOPEKA
 THOMSEN MD,GARY, SHAWNEE MISSION
 THORNTON III MD,FOXHALL P, OLAHE
 THORNTON JR MD,FOXHALL P, CONCORDIA
 THORNTON MD,JAMES L, FORT SCOTT
 THORPE MD,FRANCIS A, PRATT
 THURSTON MD,DAVID E, TOPEKA
 TICKLES MD,DEBRA F, KANSAS CITY
 TIETZE MD,DENNIS D, TOPEKA
 TIHEN MD,EDWARD N, WICHITA
 TILLER MD,GEORGE R, WICHITA
 TILLOTSON MD,DDN R, ULYSSES
 TILSON MD,WAYNE R, LAWRENCE
 TILTON MD,FRANK M, GREENVILLE,MA
 TILTON MD,FREDERICK E, WICHITA
 TINTEROW MD,MAURICE M, WICHITA
 TIDJANCO MD,REYNALDO R, KANSAS CITY
 TIPPIN JR MD,ERNEST E, ESTES PARK,CO
 TIPTON MD,KYLE M, WICHITA
 TIVORSK MD,ARCOM, ATCHISON
 TOALSON MD,WILLIAM B, SHAWNEE MISSION
 TOBIAS MD,ROGER R, LYONS
 TOCKER MD,ALFRED M, WICHITA
 TONN MD,GERHART R, WICHITA
 TODHEY MD,JOHN S, WICHITA
 TOPLIFF,CONNIE L, KANSAS CITY
 TORLINE MD,RONALD L, KANSAS CITY
 TOSH MD,FRED E, WICHITA
 TOZER MD,RICHARD C, TOPEKA
 TRACY MD,TERRY A, WICHITA
 TRAN MD, TUONG M, AUGUSTA
 TRAVIS MD,JOHN W, TOPEKA
 TREGER MD,NEWMAN V, TOPEKA
 TREGO MD,A JASON, WICHITA
 TREMPY MD,GREGORY A, BALTIMORE,MO
 TRETBAR MD,HARVEY A, WICHITA
 TRETBAR MD,LAWRENCE L, SHAWNEE MISSION
 TREWEEKE MD,MICHAEL W, WICHITA
 TRIMBLE SR MD,OAVID P, EMPORIA
 TRIOLO MD,PETER A, GARDEN CITY
 TROTTER MD,ROGER COURTNEY, OODGE CITY
 TRUEBAU MD,DAVID L, WICHITA
 TRUEWORTHY MD,ROBERT C, KANSAS CITY
 TRUJILLO MD,ANTERO A, WICHITA
 TRUONG D O,THANH N, WICHITA
 TRYGG,KELLY A, KANSAS CITY
 TSAI MD,CHIA-HSUN, TOPEKA

*Probationary members.

TSCHOPP MD,CHARLES F, ANCHORAGE,AK
TTOFI MD,CHRISTOPHER S, NEWINGTON,CT
TUCKER D O,DAVID A, WICHITA
TUCKER MD,SHERIDAN G, SHAWNEE MISSION
TUCKER MD,VIRGINIA L, KANSAS CITY
TURITTO MD,GIOIA, WICHITA
TURLEY,BRIAN R, LENEXA
TURNER MD,JOHN W, GARDEN CITY
TURNER MD,KENNETH B, GARDEN CITY
TURNER MD,ROBERT N, WICHITA
TUTUSKA MD,PETER J, TOPEKA
TWEET MD,FREDRICK A, PITTSBURG

U

UBELAKER MD,ERNEST J, SOUTH HAVEN
UHLIG MD,PAUL J, WICHITA
UHLIG MD,PAUL N, WICHITA
UHR MD,NATHANIEL, TOPEKA
UNDERWOOD MD,CHARLES C, EMPORIA
UNDERWOOD,JOHN (JOHNSON IV), KANSAS CITY
UNRUH MD,GREGORY K, KANSAS CITY
UNRUH,SUSAN E, AURORA,CO
UNTERMAN MD,STEVEN R, KANSAS CITY
UTLEY MD,JAMES HARMON, KANSAS CITY,MO
UY MD,WILSDN O, COFFEYVILLE

V

VACCA,JOSEPH L, KANSAS CITY
VACHAL MD,EVA, GARDEN CITY
VAL-MEJIAS MD,JESUS E, WICHITA
VALK MD,WILLIAM L, SHAWNEE MISSION
VAN DE VEER MD,SCOTT M, KANSAS CITY
VAN GALLERA MD,ROBERT, WICHITA
VAN GEEM MD,THOMAS A, WICHITA
VAN HOUDEN MD,CHARLES E, CHANUTE
VAN LEEUWEN MD,GERARD J, WICHITA
VAN SICKLE MD,GREGGORY J, TOPEKA
VANDE GARDE MD,LARRY D, TOPEKA
VANDER VELDE MD,STANLEY LEROY, EMPORIA
VANDERVEEN DEBORAH K, SHAWNEE MISSION
VANOIVORT MD,DANIEL L, KANSAS CITY
VANNAMAN MD,DONALD D, SHAWNEE MISSION
VANVELDHUIZEN MD,PETER J, SHAWNEE MISSION
VARENHORST MD, MICHAEL P, WICHITA
VARGHESE MD,GEORGE, KANSAS CITY
VASUDEVAN MD,GDPI, WICHITA
VATS MD,TRIBHAWAN S, KANSAS CITY
VATS, ATUL, KANSAS CITY
VAUGHAN MD,O ANN, WICHITA
VEAL, M KATHRYN, WICHITA
VENUTI,SUSAN E, KANSAS CITY
VERMA MD,ASHA, PARSONS
VERNON MD,MARY C, LAWRENCE
VESOM MD,PITT, ATCHISON
VIERRA,ANTHONY R, KANSAS CITY
VIERRA,MICHAEL J, KANSAS CITY
VIERTHALER MD,CARL A, DODGE CITY
VIERTHALER MD,LYLE D, WICHITA
VIERTHALER MD,STEPHEN L, DODGE CITY
VILLARANTE MD,FE T, HAYS
VIN ZANT MD,LARRY E, WICHITA
VINE MD,DONALD LEE, WICHITA
VINZANT MD,MARK N, DERBY
VINZANT MD,WHITNEY L, WICHITA
VODONICK MD,DAVID S, SHAWNEE MISSION
VOGEL MD,STANLEY J, TOPEKA
VDGT MD,VERNON W, NEWTON
VOLKMANN II MD,HARLEY W, MANHATTAN
VOORHEES MD,CARROLL D, LEAVENWORTH
VOORHEES MD,GORDON S, LEAVENWORTH
VORAN MD,DAVID A, SHAWNEE MISSION
VORHEES MD,VICTOR J, YATES CENTER
VOTAPKA MD,WILLIAM L, STOCKTON
VOTH MD,ERIC A, TOPEKA
VU MD,KHANH T, MARION
VU,ANN L, KANSAS CITY
VU,TRIEB B, KANSAS CITY

W

WADE MD,EDWARD J, WICHITA
WADE MD,THEODORE E, LIBERAL
WADUD MD,ABDUL, WICHITA
WAGENBLAST MD,HOWARD R, SALINA

WAHBEH,ANTHONY, KANSAS CITY
WAKEFIELD MD,KENNETH M, WICHITA
WALD MD,JEFFREY A, SHAWNEE MISSION
WALDDRF JR MD,MELVIN H, GREENSBURG
WALIA MD,JAG S, TOPEKA
WALKER D.O., MARSHALL D, WICHITA
WALKER MD,JACK D, SHAWNEE MISSION
WALKER MD,NELLIE G, LEE'S SUMMIT,MO
WALKER MD,WILLIAM H, ESKRIDGE
WALKER MD,WILLIAM K, SEDAN
WALL MD,DAVID M, WICHITA
WALL MD,TERRY J, TOPEKA
WALLACE D D,RICHARD B, WICHITA
WALLACE JR MD,WAYNE D, ATCHISON
WALLACE MD,BRETT E, TOPEKA
WALLACE MD,LEO F, TOPEKA
WALLING MD,ADRIAN E, WICHITA
WALLING MD,ANNE D, WICHITA
WALLS MD,WILLIAM J, TOPEKA
WALSH DO,LESLIE L, WICHITA
WALSH MD,THOMAS E, ONAGA
WALTERS MD,BYRON W, SUN CITY,AZ
WALTON MD,PHILIP D, HORTON
WALZ MD,ROYCE C, TOPEKA
WANG MD,SIDNEY W, SHAWNEE MISSION
WANLESS MD,KIRK M, TOPEKA
WARD MD,CYNTHIA L, WICHITA
WARD MD,HOWARD N, TOPEKA
WARD MD,JAMES A, BELLEVILLE
WARD MD,LARRY G, WICHITA
WARE MD,LUCILE M, TOPEKA
WARNER MD,RICHARD B, SHAWNEE MISSION
WARNOCK MD,JULIA K, KANSAS CITY
WARREN JR MD,JOHN W, WICHITA
WARREN MD,LINDA D, HANOVER
WARREN MD,LLOYD P, WICHITA
WARREN MD,ROGER D, HANOVER
WARREN MD,WIRT A, WICHITA
WARRICK MD,DAVID ALAN, TOPEKA
WATERS MD,CLARENCE N, SALINA
WATKINS,DEAN D, KANSAS CITY
WATKINS MD,STEVEN C, TOPEKA
WATSDON MD,RICHARD L, ANOOVER
WATTS MD,GARRETT E, WICHITA
WATTS MD,HARRY E, HAYS
WAUGH MD,CHARLES W, TOPEKA
WAXMAN MD,DAVID, SHAWNEE MISSION
WAXMAN MD,STEVE, KANSAS CITY
WEAVER MD,J ROBERT, WICHITA
WEAVER MD,JACK D, WICHITA
WEAVER MD,WALTER O, TOPEKA
WEBB MD,DAVID E, WICHITA
WEBB MD,JAMES R, SHAWNEE MISSION
WEBER II MD,RALPH H, TOPEKA
WEBER JR MD,HUGO P, WICHITA
WEBER MD,DARRELL J, TOPEKA
WEBER MD,ROBERT W, SALINA
WEBER MD,ROY R, HALSTEAD
WEBER MD,RUTH M, YATES CENTER
WEBER MD,WALLACE N, HAYS
WEBSTER MD,BOBBY W, WICHITA
WEDDLE MD,DOUGLAS P, FORT SCOTT
WEDEL MD,ALAN K, SALINA
WEDEL MD,KENNETH O, MINNEAPOLIS
WEDEL MD,KERMIT G, MINNEAPOLIS
WEED MD,JOHN C, KANSAS CITY
WEIDENSAUL MD,D N, HUTCHINSON
WEIGAND MD,JOEL T, WELLINGTON
WEIGEL MD,JOHN W, KANSAS CITY
WEINER MD,GARY B, SHAWNEE MISSION
WEINGART MD,JAMES H, SHAWNEE MISSION
WEIPPERT MD,EDWARD J, WICHITA
WEISHAAR MD,PAUL D, WICHITA
WEISS MD,MARLON, WICHITA
WELCH MD,LAUREN A, GARDEN CITY
WELCH MD,LAUREN K, WICHITA
WELCH MD,MAURA S, GARDEN CITY
WELCH MD,WADE B, CHICAGO,IL
WELL MD,MICHAEL A, LAWRENCE
WELLS MD,BRUCE W, WINFIELD
WELLSHEAR MD,CHARLES C, WICHITA
WELSH MD,NANCY JANE, TOPEKA
WELTNER MD,ROGER P, BELLOIT
WENGER MD,GREGG D, SABETHA
WENINGER MD,JOHN H, WICHITA
WERDER D O,STEVEN F, WICHITA
WERNER MD,JAMES P, TOPEKA
WERNER MD,WILLARD F, TRIBUNE
WERTH MD,DARRELL D, HAYS
WERTZBERGER MD,JOHN, LAWRENCE
WESBROOK MD,C WILSON, WICHITA
WESCOE MD,W CLARKE, SPIRER,MN
WEST MD,WILLIAM T, WICHITA
WESTFALL,JOHN M, WICHITA
WETZEL MD,ORVILLE R, WICHITA
WHEELER MD,ALICE T, WICHITA
WHEELER MD,DWIGHT E, NEWTON
WHEELER MD,NICKY RAY, WICHITA
WHEELER MD,PINCKNEY R, WICHITA
WHITAKER MD,JAMES A, WICHITA
WHITE MD,CHARLES F, GLENDAL, AZ
WHITE MD,CHARLES L, QUINCY,WA
WHITE MD,CHARLES M, WICHITA
WHITE MD,DONALD C, COFFEYVILLE
WHITE MD,FAGAN N, RUSSELL
WHITE MD,R BURNLEY, WINFIELD
WHITEHEAD MD,RICHARD E, SHAWNEE MISSION
WHITESIDE MD,WILLIAM H, WICHITA
WHITFIELD MD,STEVEN S, SHAWNEE MISSION

WHITLEY MD,DOUGLAS M, SHAWNEE MISSION
WIBLE MD,KENNETH L, KANSAS CITY
WICINA,GENDN M, KANSAS CITY
WIEBE,ERIC, WICHITA
WIEGMAN MD,HUGH A, HAYS
WIENS MD,J WENDELL, NEWTON
WIENS MD,JOHNATHAN G, SHAWNEE MISSION
WIENS MD,LYNN A, KANSAS CITY,MO
WIGGINTON D.O., GERALD D, SHAWNEE MISSION
WIGGLESWORTH MD,ANNE, MANHATTAN
WILCOX EXEC SEC, GENE M., WINFIELD
WILCOX JR MD,HOWARD L, HAYS
WILDER MD,LOWELL W, WICHITA
WILDS MD,CHARLES E, BELLA VISTA,AR
WILES MD,DENNIS D, WICHITA
WILEY MD,CLARENCE L, HUTCHINSON
WILEY MD,JOHN H, SHAWNEE MISSION
WILEY MD,THOMAS M, HODDLRIDGE,IL
WILFONG,DAVID, KANSAS CITY
WILKINSON MD,LARRY K, WICHITA
WILLARD EXEC SEC, JUDY, ELLINWOOD
WILLCOX,JAMES A, WICHITA
WILLIAMS MD,CHARLES L, WICHITA
WILLIAMS MD,EVAN R, MESA,AZ
WILLIAMS MD,HOMER J, LAGUNA NIGUEL,CA
WILLIAMS MD,RONALD P, PEPPER PIKE,OH
WILLIAMS MD,THOMAS A, SHAWNEE MISSION
WILLIAMS MD,WADE L, SHAWNEE MISSION
WILLIAMS,GARY G, SHAWNEE MISSION
WILSON MD,DAVID B, KANSAS CITY
WILSON MD,J WELLS, WICHITA
WILSON MD,JAMES W, COFFEYVILLE
WILSON MD,LORI J, SHAWNEE MISSION
WILSON MD,ROBERT A, BUCKLIN
WILSON MD,ROBERT B, SHAWNEE MISSION
WILSON MD,ROBERT L, WICHITA
WILSON MD,SLOAN J, SHAWNEE MISSION
WILSON,MICHAEL A, KANSAS CITY
WIN MD,AYE M, DODGE CITY
WINBLAD MD,J KENT, WINFIELD
WINBLAO MD,JAMES N, WINFIELD
WINBLAO MD,JOHN M, WINFIELD
WINDHOLZ MD,ARTHUR F, WICHITA
WINN MD,TERRIA L, WICHITA
WISDOM MD,JAY K, SUN CITY,AZ
WISE MD,JOSEPH E, KANSAS CITY
WISE MD,MORRIS F, KANSAS CITY,MO
WISNER JR MD,HARRY J, WICHITA
WITTMAN MD,A T, PRATT
WITTMANN MD,ALBERT F, WICHITA
WOHLER MD,JOHN P, SAN ANTONIO,TX
WOLF MD,KARL T, KANSAS CITY
WOLF MD,PATRICK G, WICHITA
WOLF,CHRISTINE, KANSAS CITY
WOLFE MD,BRIAN D, IOLA
WOLFE MD,FREDERICK, WICHITA
WOLFF MD,FREDERICK P, PRATT
WOLKOFF MD,COR A STARK, HONOLULU,HI
WOLLMANN MD,MARTIN, LAWRENCE
WONG MD,CURTIS S F, DENVER,CO
WONG MD,GEORGE F, KANSAS CITY,MO
WOOD JR,ROBERT A, KANSAS CITY
WOOD MD,EDWARD R, TOPEKA
WOOD MD,FRED M, SHAWNEE MISSION
WOOD MD,GARY B, WICHITA
WOOD MD,GARY L, ARKANSAS CITY
WOOD MD,ROBERT D, WICHITA
WOODALL MD,DENNIS C, SALINA
WOODHOUSE MD,CHARLES L, WICHITA
WOODRING MD,CATHY S, WICHITA
WOODS MD,DENNIS D, HUTCHINSON
WOODS MD,S DWIGHT, OLATHE
WORTMAN MD,JACK A, HUTCHINSON
WRAY MD,ALEXANDER J, WICHITA
WRIGHT III MD,GILL C, KANSAS CITY
WRIGHT MD,CHRISTOPHER D, WICHITA
WRIGHT MD,KENDALL M, EMPORIA
WRIGHT MD,STANLEY E, HASTINGS,NE
WU MD,JIN-TZE, WICHITA
WURSTER MD,G. RICHARD, SHAWNEE MISSION
WYATT-HARRIS MD,PATRICIA G, WICHITA

Y

YAGHMOUR MD,TALAA E, PITTSBURG
YANG MD,JASON G H, TOPEKA
YANG,ALEXANDER Q, KANSAS CITY
YAPLE JR D O,RICHARD A, SALINA
YE MD,RICHARD C, SHAWNEE MISSION
YEH MD,ROBERT M, TOPEKA
YEOMANS MD,RONALD N, SHAWNEE MISSION
YOACHIM MD,ROBERT W, ARKANSAS CITY
YOAKUM PYLE,MARGARET, KANSAS CITY
YODER MD,EMERSON O, DENTON
YODER MD,VERNON E, HESSTON
YOESEL,MICHAEL, OLATHE
YOHE MD,RUTH M, SHAWNEE MISSION
YOO MD,GEORGE H, TOPEKA
YOON MD,C J, TOPEKA
YORKE JR MD,CRAIG H, TOPEKA
YOST JR MD,JOHN G, KANSAS CITY,MO
YOUN MD,HWAN, GREAT BEND
YOUNG MD,DOUGLAS L, WICHITA

*Probationary members.

YOUNG MO, JOHN W, SHAWNEE MISSION
 YOUNG MO, PAUL E, TOPEKA
 YOUNG MO, THEODORE E, TOPEKA
 YOUNGBERG MO, DEAN I, WICHITA
 YOUNGMAN MO, DARRELL J, WICHITA
 YOXALL, KELLY E, KANSAS CITY
 YULICH MO, JOHN O, SABETHA
 YUT JR MO, JOSEPH P, SHAWNEE MISSION

Z

ZABEL MO, KENNETH P, PITTSBURG

ZACHARIAS MO, DAVIO LLOYD, TOPEKA
 ZACK MO, ASHLEY S, SHAWNEE MISSION
 ZAINALI MO, ASSAOOLLAH, LIBERAL
 ZAMIEROWSKI MO, DAVIO S, SHAWNEE MISSION
 ZARNOW MO, HILARY, WICHITA
 ZARR MO, JAMES S, KANSAS CITY, MO
 ZATZKIN MO, JAY B, WICHITA
 ZAUCHE MO, JAMES T, GAROEN CITY
 ZAYLOR MO, CHARLES L, NEWTON
 ZELLER MO, MYRON J, GAROEN CITY
 ZEPICK MO, LYLE F, WICHITA

ZERBE MO, KATHRYN, TOPEKA
 ZIEGLER MO, MARK L, WICHITA
 ZIELKE MO, STEVEN L, WICHITA
 ZIMMERMAN MO, BRUCE E, OLATHE
 ZIMMERMAN MO, KENNETH O, WICHITA
 ZIMMERMAN MO, WILLIAM H, TOPEKA
 ZINN MO, THOMAS W, KANSAS CITY
 ZONGKER MO, PHILIP E, WICHITA
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3386

Physician Distribution by Cities

EXPLANATION OF CODES USED IN THIS SECTION

Line 1: Doe, John R., 1234 Oak St., 67052
(Name) (Street Address) (Zip Code)
Line 2: (654-2222) 123456789
(Telephone Number) (I.D. Number)
Line 3: 33 M 1902 58 FP
(Year of Birth) (Sex) (Medical School) (Year of Licensure) (Specialty)

Telephone area code follows city name. * Probationary Members

ABILENE — 913 (Dickinson County Medical Society)

BERKLEY MO, OON H, 1111 N 8RAOY, 67410
263-4131 1902610061
35 M 1902 62 FP
BIGGS MO, J OENNIS, 1405 N CEDAR, 67410
263-7190 1902740097
48 M 1902 74 FP
CHAFFEE MO, OEAN C, RR 1, 67410
1902440298
11 M 1902 44 00
COLEMAN MO, GARY, 1405 N CEOAR, 67410
263-7190 1902720223
46 M 1902 73 FP
MOHLER MO, JACK M, 420 NE TENTH, 67410
263-1419 1902610592
32 M 1902 62 PM
NARCISO MD, VICENTE O, 515 NE 10TH ST, 67410
263-2253 74810680052
45 M 74810 76 GS
RORA BAUGH MO, DONALD C, PROFESSIONAL BLOG 1111 8RADY, 67410
263-4131 1902580782
33 M 1902 59 FP
SCHWARTING MO, J STEVEN, 1405 N CEOAR, 67410
263-7190 3401720307
46 M 3401 73 FP
SHEERN MO, MARK DOUGLAS, 1111 N 8RADY, 67410
263-4131 1902761221
51 M 1902 77 FP
SONGER MO, HERBERT L, 1007 SPRUCEWAY, 67410
1902380546
12 M 1902 38 00

ALTAMONT — 316 (Labette County Medical Society)

JACKSDN MO, VICTOR L, BOX 467, 67330
2105500257
20 M 2105 54 00

ANDALE — 316 (Sedgwick County Medical Society)

STECH MD, JOSEPH M, PO BOX 38, 67001
796-0601 3006560660
27 M 3006 57 FP

ANDOVER — 316 (Sedgwick County Medical Society)

LEMDNS MO, STEPHEN F, 310 W CENTRAL, 67002
733-1331 1902821020
54 M 1902 83 FP
WATSON MO, RICHARD L, 524 N ANOOVER RO, 67002
733-1331 1902851891
59 M 1902 FP

ANTHONY — 316 (Ninnescah Medical Society)

ANTRIM MD, PHILIP JENIFER, BOX 84 RT 1, 67003
1902420033
15 M 1902 42 00
MILLER MO, PHILIP, PO BOX 410, 67003
842-5144 1902700796
44 M 1902 GS

ARKANSAS CITY — 316 (Cowley County Medical Society)

ALVAREZ MO, NORBERTO, 515 N SUMMIT, 67005
442-4850
29 M 27501 73 FP
AUCAR MD, ALFREDO, BOX 1105, 67005
442-1710 27501531303
23 M 27501 70 00
CAMPBELL MD, GARLAND L, 18 LAKE RIDGE RD RR 5 BOX 163, 67005
1902400113
13 M 1902 40 00
CRANE MD, REBECCA S, 510 W RAOIO LANE, 67005
442-2100 1902850348
59 F 1902 88 FP
HILL MO, JAMES E, 1019 N SECONO, 67005
1902340277
09 M 1902 34 00
MARVEL MD, JAMES EBBERT, 2545 N GREENWAY, 67005
442-0222 3901680573
43 M 3901 72 ORS
MDRTON MD, ROBERT A, AC OFFICE BLOG #300, 67005
442-0370 1902782172
51 M 1902 80 IM
DLO MD, JERRY L, PO BOX 1148 510 W RAOIO LN, 67005
442-2100 1902741701
49 M 1902 75 FP

PEREIRA MO,WILLY G, PO BOX 718, 67005
442-8540 73701670091
39 M 73701 73 IM

ROSS MO,OAVIO K, PO BOX 1148 510 W RAOIO LN, 67005
442-2100 1902740968
48 M 1902 75 FP

SCHMEIOLER MD,OAVIO ALLEN, 510 W RAOIO LN PO BOX 1148,
67005
442-2100 1902791589
54 M 1902 82 FP

SCHOELING MO,RICK O, 510 W RAOIO LANE, 67005
442-2100 1902861498
59 M 1902 89 FP

SINGH MO,GIRVAR, 2508 EDMONT OR, 67005
442-4300 49555640021
40 M 49555 78 OPH

SMITH MD,BRUCE G, 210 S 2ND, 67005
1902441421
20 M 1902 44 00

SMITH MO,NEWTON C, PO BOX 1148, 67005
442-2100 39D1450594
21 M 3901 51 FP

WOOD MO,GARY L, 401 N SUMMIT, 67005
442-0103 64936810053
52 M 64936 83 R

YOACHIM MO,ROBERT W, 510 W RADIO LN PO BOX 1148, 67005
442-2100 3005781417
52 M 3005 80 FP

ATCHISON — 913 *(Atchison County Medical Society)*

BOSSE MO,FRANK K, 1301 RIVERVIEW DR, 66002
2802330106
09 M 2802 36 00

BURKE MO,JOSEPH V, 1400 N SECONO, 66002
367-5496 3006660125
35 M 3006 71 GS

EPLER MD,JOHN R, 1225 N SECOND, 66002
367-0880 1902780595
53 M 1902 82 FP

FAST MD,ROBERT E, 1225 N 2ND, 66002
367-0362 1902740283
48 M 1902 75 OBG

FAST MO,W SPENCER, 1301 N SECONO, 66002
367-7417 3006390268
11 M 3006 40 FP

GROWNEY MD,DANIEL J, 1301 N SECONO ST, 66002
367-3400
59 M 3D06 87 GS

HART MD,LAWRENCE E, 1412 N 2ND, 66002
367-5054 1902640351
32 M 1902 65 FP

JONES MO,MICHAEL P, 1225 N 2ND, 66002
367-0880 1902830991
55 M 1902 85 FP

LYNE MO,ALAN W, 1225 N 2ND, 66002
367-0880 1902841527
57 M 1902 88 FP

MESROPIAN MO,GEORGE D, 1201 N 2ND, 66002
367-1114
48 M 60501 80 GS

MORRISON MO,IRA R, 825 N TENTH, 66002
1611360696
07 M 1611 38 00

SHRIWSE MO,TOM L, 1301 N 2ND, 66002
367-3646
54 M 1902 ORS

TAYIEM MD,A K, 1225 N SECONO, 66002
367-1114 33002680012
43 M 33002 72 GS

TIVORSAK MO,ARKOM, PO BOX 127, 66002
367-2131 89102680635
40 M 89101 76 R

VESOM MD,PITT, 1301 N 2ND, 66002
367-3100 89102740085
49 M 89104 83 CO

WALLACE JR MD,WAYNE O, 1301 N 3RD, 66002
367-7300 2803650732
36 M 2803 67 FP

ATTICA — 316 *(Ninnescah Medical Society)*

STONE MO,GRANT C, 500 N HARPER, 67009
254-7219 560535048D
08 M 5605 69 FP

AUGUSTA — 316 *(Butler-Greenwood County Medical Society)*

ANDERSON MO,DALE W, 120 W JOSEPHINE, 67010
775-5432 1902550018
30 M 1902 55 FP

BARBER MO,JAMES L, 120 W JOSEPHINE, 67010
775-5432 1902570035
31 M 1902 57 FP

TRAN MO,TUONG M, 120 W JOSEPHINE, 67010
775-5432 94101720131
39 M 94101 77 FP

BASEHOR — 913 *(Wyandotte County Medical Society)*

BURGER MO,WILLIAM E, RT 1, 66D07
3006510069
21 M 3006 51 00

BAXTER SPRINGS — 316 *(Crawford-Cherokee County Medical Society)*

ALQUIST MD,VERYL O, 21ST & FAIRVIEW, 66713
1902420017
17 M 1902 42 00

CHUBB MO,RICHARD M, PO BOX 578, 66713
856-2444 1606540228
29 M 1606 60 FP

KIMMELL MD,RICHARD A, 441 E 11TH, 66713
856-5400
53 M 1902 85 FP

BELLEVILLE — 913 *(Republic County Medical Society)*

DOUBEK MD,HERBERT O, PO BOX 250, 66935
527-2237 1902560323
28 M 1902 56 FP

HOLT MO, ROBERT E, 2316 G, 66935
 527-2237 702760518
 59 M 1902 77 FP

SCOTT MO, OUANE, 1206 18TH, 66935
 527-2217
 34 M 1902 61 FP

WARO MO, JAMES A, RR 2 BOX 106, 66935
 1902581002
 34 M 1902 59 00

BELOIT — 913
(Mitchell County Medical Society)

CONCANNON MO, CRAIG A, 310 W 8TH, 67420
 738-2246 1902840415
 5B M 1902 IM

OBRATZ MO, ROBERT A, 700 N PINE, 67420
 1902520224
 24 M 1902 52 00

ORAKE MO, OUGLAS J, 112 W MAIN PO BOX 605, 67420
 738-2246 1902710317
 43 M 1902 72 FP

FUGATE MO, CARL L, 310 W 8TH, 67420
 738-2246 1902840601
 57 M 1902 FP

KLENOA JR MO, MARTIN B, BELOIT MEO CTR 310 W 8TH, 67420
 738-2246 1643630351
 3B M 1643 66 GS

WELTNER MO, ROGER P, PO BOX 571, 67420
 1902441588
 18 M 1902 44 00

BLUE RAPIDS — 913
(Northeast Kansas Medical Society)

BUCK JR MO, WILLIAM O, 607 LINCOLN, 66411
 226-7202
 59 M 1902 89 FP

LAWLESS MO, HAROLD L, PO BOX 127, 66411
 226-7202 702540381
 29 M 702 58 FP

BONNER SPRINGS — 913
(Wyandotte County Medical Society)

MAY MO, KENNETH L, 525 MACGRANTWOOD OR, 66012
 1902510482
 20 M 1902 41 00

BUCKLIN — 316
(Ford County Medical Society)

LUNA MO, ANTHONY O, 203 N MAIN, 67834
 826-3266 1902821071
 54 M 1902 83 FP

WILSON MO, ROBERT A, 101 N FORO, 67834
 826-3217 1902842001
 54 M 1902 85 FP

BUFFALO — 316
(Southeast Kansas Medical Society)

BEAL MD, RAYMOND J, RR #1 BOX 21, 66717
 1902380031
 12 M 1902 38 00

CANEY — 316
(Southeast Kansas Medical Society)

COLE MO, RICHARD F, PO BOX 325, 67333
 879-2128 515710078
 41 M 515 FP

MOORE MO, ROBERT F, 601 S HIGH, 67333
 879-2135 1902560765
 28 M 1902 56 FP

CARBONDALE — 913
(Shawnee County Medical Society)

HORNBAKER MO, STANLEY O, 211 E MAIN, 66414
 564-7111
 56 M 1902 IM

CHANUTE — 316
(Southeast Kansas Medical Society)

ABBUEHL MO, OON R, 932 WINOSOR, 66720
 1902440018
 18 M 1902 44 00

ASHLEY MO, SAMUEL G, 505 S PLUMMER, 66720
 1902430021
 16 M 1902 43 00

BURKMAN MO, REUBEN J, 1501 W 7TH, 66720
 431-9310 1902540101
 28 M 1902 54 FP

GEHRT MO, EARL B, 505 S PLUMMER, 66720
 431-2500 1902620261
 32 M 1902 63 FP

KIHM MO, ALBERT A, 505 S PLUMMER, 66720
 431-2500 1902550646
 27 M 1902 55 FP

KING O O, OAVIO, 505 S PLUMMER, 66720
 431-2500 3979780035
 00 M 3979 ORS

MABEN MO, PAMELA S, 505 S PLUMMER, 66720
 431-2500 1902791210
 54 F 1902 80 IM

MC FARLANO MO, GRETA S, 505 S PLUMMER, 66720
 431-2500 1902791295
 54 F 1902 81 PO

MIH MO, ALEXANDER, 1002 WEST 4TH, 66720
 473-2227 24209470116
 22 M 24209 72 AN

PARHAM MO, VEROON W, 505 S PLUMMER, 66720
 431-2500 1902731411
 47 M 1902 75 FP

TAYLOR MO, CATHY M, 1409 W 7TH, 66720
 431-0340 1902831289
 57 F 1902 88 OBG

THOMEN II MO, ROBERT K, 505 S PLUMMER, 66720
 431-2500 1902841802
 59 M 1902 86 FP

VAN HOUOEN MO, CHARLES E, 505 S PLUMMER, 66720
 431-2500 1902761434
 52 M 1902 77 GS

CHAPMAN — 913
(Dickinson County Medical Society)

HAMEL MO, GREGORY L, 413 N MARSHALL, 67431
 922-6400 1902820678
 56 M 1902 85 FP

SVOBDDA MD,CHARLES R, 225 W 9TH PO BOX 218, 67431

18 M 1902 46 00
1902460663

CHETOPA — 316
(Labette County Medical Society)

PEFFLY MD,ELMER O, 327 MAPLE 80X 266, 67336

236-7188 3901530601
22 M 3901 56 FP

CLAY CENTER — 913
(Clay County Medical Society)

BROWNING MD,JIMMIE L, PD BOX 520, 67432

632-2181 1902780285
50 M 1902 79 FP

BUTT MD,MUHAMMED, 2201 7TH, 67432

632-2191 70401690156
46 M 70401 SG

DALUM MD,PETER JOSEPH, PO BOX 520, 67432

632-2181 2803760163
45 M 2803 77 FP

ERICKSON MD,KENT E, PD BOX 520, 67432

632-2181
56 M 1902 FP

HATESOHL MD,STANLEY M, PO BOX 520, 67432

632-2181 1902840750
57 M 1902 87 FP

PENNER MD,TIMOTHY M, PO BOX 520, 67432

632-2181 1902861331
59 M 1902 FP

CLYDE — 913
(Cloud County Medical Society)

CDULTER D O, THAYNE A, 306 N HIGH, 66938

12 M 2878 37 OD
2878370034

FREEBORN JR MD,WARREN S, 716 GRAND AVE, 66938

26 M 1720 60 00
1720510312

COFFEYVILLE — 316
(Southeast Kansas Medical Society)

BLOCK MD,JEROME E, PO BDX 464, 67337

251-2400 3305640033
38 M 3305 IM

CAMPBELL MD,WILLIAM H, 1411 W 4TH STE D, 67337

251-3235 1902650098
39 M 1902 66 DPH

CANTWELL MD,MICHAEL L, 209 W 7TH PO BDX 492, 67337

251-4901 1902820295
56 M 1902 P

DICKINSON MD,CHARLES R, 608 SPRUCE, 67337

20 M 1606 47 OD
1606450300

DIXON MD,RAYMOND W, BDB WILLDW #1, 67337

251-1090 4706711312
46 M 4706 77 GS

HAN MD,CHAN S, 9DB SIGGINS, 67337

251-1560 58306610048
35 M 58306 74 PD

HDWERTER JR MD,BERNARD E, PO BOX 659, 67337

251-4790 1803680490
43 M 1803 73 U

MILLER O O,STEPHEN A, PD BOX 489, 67337

251-0777 2878760509
47 M 2878 87 OBG

READ MD,WILLIAM T, 411 W 9TH, 67337

251-1120 2802400678
16 M 2802 46 FP

UY MD,WILSON O, COFFEYVILLE MEM HOSP 1D1 TYLER, 67337

251-1200 74801670192
42 M 74801 73 PATH

WHITE MD,DDNALD C, PD BOX 1449, 67337

251-1200 3515650694
35 M 3515 72 R

WILSON MD,JAMES W, 1802 W 4TH PO BOX 469, 67337

251-5210 3901580790
26 M 3901 GP

COLBY — 913
(Northwest Kansas Medical Society)

KOLSTE MD,REX J, 310 E COLLEGE, 67701

462-7565 3005790742
53 M 3005 83 FP

SMITH JR MD,FLDYO L, B80 SUNSET, 67701

20 M 1902 44 00
1902441430

COLDWATER — 316
(Iroquois County Medical Society)

GOERING MD,DONALD D, BDX 748, 67029

582-2136 1902560421
31 M 1902 56 FP

CONCORDIA — 913
(Cloud County Medical Society)

BRAY MD,AVIS PAGE, PD BDX 589, 66901

17 F 702 60 DD
702540089

FDWLER MD,WAYNE L, 1010 3RD PD BOX 589, 66901

243-1560 1720470299
23 M 1720 53 IM

MYERS MD,DANIEL L, 910 W 11TH, 66901

243-4272 1902821356
56 M 1902 88 GS

RUZICKA MD,LAWRENCE J, 1115 HILLSIDE, 66901

13 M 3005 46 00
3005400588

STRYKER JR MD,HENRY B, 717 FIRST, 66901

19 M 3501 52 DO
3501440999

THORNTON JR MD,FOXHALL P, 723 W 7TH, 66901

243-1560 5101510656
25 M 5101 55 IM

COUNCIL GROVE — 316
(Flint Hills Medical Society)

BLACKBURN MD,RDBERT W, 703 N WASHINGTON, 66846

22 M 1902 49 DD
1902490040

FRESE MO, DANIEL R, 604 N WASHINGTON PO BOX A, 66846
 767-5126
 53 M 1902 78 FP

HORNUNG MO, JOEL E, 221 HOCKADAY, 66846
 767-5126 1902850801
 59 M 1902 86 FP

SIEGLE MD, LORA A, 221 HOCKADAY, 66846
 767-5126 1902841632
 56 F 1902 FP

CUNNINGHAM — 316 **(Wyandotte Medical Society)**

ALLBRITTEN JR MO, FRANK F, PO BOX 177, 67035
 4101380021
 14 M 4101 54 00

DENTON — 913 **(Northeast Kansas Medical Society)**

YOOER MD, EMERSON O, PO BOX 128, 66017
 1902490791
 14 M 1902 49 00

DERBY — 316 **(Sedgwick County Medical Society)**

MCKERRACHER MO, ROBERT D, 400 A N BALTIMORE, 67037
 788-1779 3901550742
 27 M 3901 56 FP

NIEOEREE MO, DAVIO W, 1410 N WOODLAWN, 67037
 788-3741 3006820785
 56 M 3006 84 FP

VINZANT MO, MARK N, 1410 N WOODLAWN, 67037
 788-3741 64914751614
 45 M 64914 77 FP

DODGE CITY — 316 **(Ford County Medical Society)**

AMAWI MO, MOHAMMAD S, 2020 CENTRAL, 67801
 225-1371 87501710073
 46 M 87501 76 GS

AYUTHIA MD, ISSARA I, 2004 FREDERICK OR, 67801
 89101670474
 40 M 89101 78 PATH

BRIAN MD, DAVIO A, 201D CENTRAL, 67801
 227-1148 4102640191
 39 M 4102 89 OTO

CHOTIMONGKOL MO, ANUPONG, 2020 CENTRAL, 67801
 225-1371 89102690193
 43 M 89102 76 OBG

CONANT MD, MERRILL, 120 ROSS, 67801
 227-6550 1902830452
 00 M 1902 FP

CONARO MO, CLAIR C, 2020 CENTRAL, 67801
 225-1371 1902550247
 27 M 1902 55 IM

GARCIA MD, GUILLERMO O, 1206 FRONTVIEW, 67801
 225-7710 23101680266
 43 M 23101 77 ORS

GREENBERG MO, GEORGE E, 1904 BURR PKWY, 67801
 225-1033 40168D314
 42 M 401 72 R

HERRMAN MO, AOAM L, 2813 CENTER AVE, 67801
 1902740488
 48 M 1902 82 00

JAMBOR MO, CHRISTOPHER N, 2020 CENTRAL, 67801
 225-1371
 51 M 1902 81 PO

JOHNSON MO, HOWELL O, 2020 CENTRAL, 67801
 225-1371 1902710546
 45 M 1902 72 IM

KEISERMAN MO, WAYNE M, 2020 CENTRAL AVE, 67801
 225-1371 4102700720
 44 M 4102 89 U

KYI MO, WIN M, PO BOX 1517, 67801
 227-3141 20901730165
 49 M 20901 GS

LYNCH MO, OARYL A, 2020 CENTRAL, 67801
 225-1303 1902831084
 55 M 1902 87 PO

MARPLES MO, OUGLAS, 2020 CENTRAL, 67801
 225-1371 1902800731
 00 M 1902 IM

MCELHINNEY MO, CHARLES F, 2020 CENTRAL, 67801
 225-1371 1902620547
 36 M 1902 63 GS

MCMILLAN MO, JON M, 2010 AVE A, 67801
 225-7710 2101660756
 39 M 2101 87 ORS

NELSON MO, CHARLES G, 2020 CENTRAL, 67801
 225-1371 1902861285
 56 M 1902 89 IM

NIXON MO, JAMES E, PO BOX 1318, 67801
 225-1033 4812720738
 40 M 4812 79 OR

OHMAN MO, RICHARD J, 1810 1/2 FAIRWAY OR, 67801
 2407410664
 15 M 2407 50 00

REOBY MO, SATTI S, 808 SECONO, 67801
 227-1371 49561660114
 35 M 49504 77 U

SACHOEYA MD, REKHA, SOUTHWEST CL PO BOX 1517, 67801
 227-3141
 54 F 49574 86 PO

SCHWARTZ MD, EUGENE W, 2100 CAROUSEL, 67801
 1902500649
 24 M 1902 50 00

TROTTER MO, ROGER COURTNEY, 120 ROSS BLVD, 67801
 225-6120 1902741824
 47 M 1902 76 FP

VIERTHALER MO, CARL A, 2020 CENTRAL, 67801
 225-1371 1902781885
 53 M 1902 78 IM

VIERTHALER MO, STEPHEN L, 2020 N CENTRAL BOX 1000, 67801
 225-1371 1902771693
 51 M 1902 78 OBG

WIN MO, AYE M, PO BOX 1517, 67801
 227-3141 20901750115
 50 F 20901 IM

EL DORADO — 316 **(Butler-Greenwood County Medical Society)**

AHMAO MD, ABOU Q, 123 N ATCHISON STE 302, 67042
 321-7402 70403580188
 32 M 16002 84 OTO

BRIAN MO, ROBERT M, 1133 W FIRST, 67042
 1606300073
 D2 M 1606 31 00

COOPER MO, CATHY N, 119 N JONES, 67042
 321-2010
 62 F 1902 FP

FANNING MD,JANET L, 620 W CENTRAL, 67042
321-6051 1902820490
57 F 1902 84 FP

FANNING MO,KYLE W, 620 W CENTRAL, 67042
321-6051 1902820503
56 M 1902 84 FP

HAFFNER MD,WILLIAM N, 123 N ATCHISON, 67042
321-5630 1902610312
35 M 1902 62 GS

HARMS MO,EOWIN M, RR #1 BOX 289, 67042
3901340179
06 M 3901 36 00

KASSEBAUM MO,GLEN E, RR #2 BOX 19, 67042
1606230288
98 M 1606 24 00

KUHNS MO,HENRY R, 123 N ATCHISON, 67042
321-2100 1902850992
59 M 1902 IM

LEE MD,YONG U, 123 N ATCHISON, 67042
321-0010 58310600081
35 M 58310 77 GS

NIGHTENGAL MO,OIANE O, 119 JONES, 67042
321-2010
60 F 1902 FP

OLSEN MO,PHILLIP S, 123 N ATCHISON, 67042
321-2100 1902730849
46 M 1902 73 IM

REOBY MO,VENUMBAKA C, 123 ATCHISON ROOM 103, 67042
321-3300 49558710054
46 M 49511 79 IM

SHIELOS JR MO,JAMES M, 1325 W 3RD, 67042
4802421376
18 M 4802 46 00

SIWEK MO,CHRISTOPHER W, 123 N ATCHISON STE 303, 67042
321-5211 75911710013
48 M 75911 78 ORS

WHITE II MO,BENJAMIN E, 119 JONES, 67042
321-2010
27 M 1902 54 FP

ELKHART — 316 (Seward County Medical Society)

IWAY MD,BELINO O, 411 SUNSET BOX 878, 67950
697-2175 74811660586
42 M 74811 78 IM

IWAY MD,OLIVIA N, PO BOX 878, 67950
697-2175 74811680412
43 F 74811 80 P

PERIDO MO,DOMINADOR T, BOX 997, 67950
697-2155 74801680384
44 M 74801 75 GS

ELLINWOOD — 316 (Barton County Medical Society)

LAW MD,FINDLEY, PO BOX 668, 67526
1902510431
22 M 1902 51 00

SHIVELY MD,ROBERT M, 611 N MAIN, 67526
564-2318 1902862061
56 M 1902 89 FP

ELLSWORTH — 913 (Central Kansas Medical Society)

SEITZ JR MO,JOSEPH E, 308 KINGSLEY, 67439
1902460591
22 M 1902 46 00

EMPORIA — 316 (Flint Hills Medical Society)

AMEND MO,DOUGLAS J, 1127 CHESTNUT #300, 66801
343-6565 1902760039
46 M 1902 79 OBG

BARNETT MO,JAMES A, 919 W 12TH, 66801
342-2521 1902790124
54 M 1902 82 IM

BERNARD MO,JOHN H, 1024 W 12TH, 66801
343-6864 1902850127
58 M 1902 88 FP

BOSILJEVAC JR MD,JOSEPH E, 2522 W 15TH, 66801
343-7043 1902751650
51 M 1902 81 TS

BRAOLEY MD,H RUSSELL, 1601 STATE, 66801
343-2900 1902610096
35 M 1902 62 FP

BROCKHOUSE MO,JOHN P, 1601 STATE, 66801
343-2900 1902570060
31 M 1902 57 IM

BURGESON MD,FRANK G, 1601 STATE, 66801
342-6989 3005650151
40 M 3005 71 OPH

BUTCHER MO,THOMAS P, 2029 HUNTINGTON RD, 66801
1601340166
05 M 1601 34 00

CAMPBELL MO,EDWARD G, 1601 STATE, 66801
343-2900 1902610916
31 M 1902 62 FP

OAVIS MO,DAVID R, 2300 INDUSTRIAL RD #108, 66801
2101280155
02 M 2101 28 00

DICK JR MO,HENRY J, 25 W 5TH, 66801
342-2341 1902580251
27 M 1902 59 FP

EDWARDS MO,DAVID J, 1601 STATE, 66801
343-1191 2803690289
43 M 2803 77 ORS

GANN MO,E LAMONTE, RR #2, 66801
2802370221
07 M 2802 44 00

GARCIA MO,GOULD C, 919 W 12TH, 66801
342-2521 3607580251
32 M 3607 65 IM

GEITZ MO,JAMES M, 919 W 12TH, 66801
342-2521 1902720509
46 M 1902 73 IM

GINAYAN MO,OUANE A, 1024 W 12TH, 66801
342-5876 1902620270
35 M 1902 63 FP

GLENN MO,JAMES N, 1601 STATE, 66801
343-1191 4804660271
40 M 4804 70 ORS

HICKS JR MD,THOMAS E, 1601 STATE, 66801
343-2900 1902801533
53 M 1902 GS

HOPPER MO,CHARLES R, 1726 OLD MANOR RE, 66801
1902470294
17 M 1902 47 00

HOWELL MO,BARBARA JOYCE, 1601 STATE, 66801
343-2900 3401780903
45 F 3401 82 PD

KNECHT MD,STEPHEN M, NEWMAN HOSP 12TH & CHESTNUT, 66801
342-7722 19D27DD656
44 M 19D2 72 R

KRETSINGER OO ,W BROCK, 919 WEST 12TH, 668D1
342-2521 2878770652
48 M 2878 81 IM

KUMAR MD,RENU, 1601 STATE, 668D1
342-5881 4961D790011
55 F 49610 82 PD

LLOYD MD,JOHN C, 1127 CHESTNUT #30D, 66801
343-6565 4802761D88
50 M 4814 86 08G

MIGUELINO MD,OLIVER M, C/O NEWMAN MEM HOSPITAL, 66801
343-68DD 74801570864
35 M 74801 71 PATH

MONTGDMERY MD,MICHAEL L, 1601 STATE, 66801
343-1191 1902821305
53 M 1902 86 ORS

NAGARAJU MD,ARRAMRAJU, NEWMAN MEM HOSP 12 & CHESTNUT, 66801
343-68D0 49521730012
48 M 49521 84 P

NEUER MO,FREDERICK S, 12TH & CHESTNUT, 66801
342-7722 3601710144
46 M 3601 74 R

PASTDR MD,VICTDR HUGO, 1601 STATE STE 101, 668D1
342-7715 132D268DD41
43 M 132D2 78 U

PIERSDN MD,MARK E, 1024 W 12TH, 668D1
343-6864 19D2801592
5D M 19D2 82 FP

SCHELLINGER MD,RICHARD P, 1128 LAWRENCE, 66801
342-D722 3005490498
22 M 3D05 56 GS

SNOWBARGER MD,MARVIN D, 1601 STATE, 66801
343-2900 19D2551D65
29 M 19D2 55 FP

SPEARS MD,CHESTER A, NEWMAN HOSP 12TH & CHESTNUT, 66801
343-6800 2834761575
5D M 2834 81 PATH

STEEVES MD,JDHN H, 1225 W 6TH, 66801
343-1D65 670158D875
32 M 67D1 R

STDNE MD,CHESTER W, 1601 STATE, 66801
343-29DD 19028D1037
53 M 1902 85 HEM

TRIMBLE SR MD,DAVID P, 17D3 SHERWOODWAY, 66801
342-2572 19D232D454
D4 M 1902 32 OPH

UNOERWDDO MD,CHARLES C, 25 WEST 5TH, 66801
342-2341 190232D462
07 M 1902 32 IM

VANDER VELDE MD,STANLEY LERDY, 1527 BERKLEY, 668D1
190243D748
16 M 19D2 43 00

WRIGHT MD,KENDALL M, 1D24 WEST 12TH, 66801
343-2376 19D2711232
45 M 19D2 72 FP

ERIE — 316 (Labette County Medical Society)

BRYAN MD,EMERY C, 212 N GRANT, 66733
190232D098
D4 M 19D2 32 OD

CULVER D D,SDNYA KATHERINE, PO BOX 78, 66733
244-3267 287886D112
61 F 2878 87 FP

HANDSHY MO,STANLEY E, PO BOX 199, 66733
244-3291 19027908D9
54 M 19D2 82 FP

ESKRIDGE — 913 (Flint Hills County Medical Society)

WALKER MD,WILLIAM H, 108 SECONO AVE PO BOX 218, 66423
2401381239
1D M 24D1 40 00

EUDORA — 913 (Douglas County Medical Society)

8OCK MD,PETER A, 101 W 10TH PO BOX 539, 66025
542-2108 1902842299
57 M 1902 FP

FUNK MO,EOWARD D, RT 1/80X 40A, 66025
19D2410186
04 M 1902 41 00

HDLLADAY MO,KENNETH R, PO BOX G, 66025
542-2345 19D258043D
34 M 1902 61 FP

EUREKA — 316 (Butler-Greenwood County Medical Society)

CISKEY MD,WILLIAM J, PD 8DX 310, 67045
583-7401 190273D253
47 M 1902 74 FP

SKAER MD,STANLEY ALLEN, 100 E 16TH, 67045
583-7486 39D1650828
4D M 39D1 78 GS

FORT SCOTT — 316 (Bourbon County Medical Society)

AKERS MD,GUY I, 618 MEADOW LN, 66701
1902530017
20 M 1902 53 D0

ALDIS MO,HENRY, 6 E 13TH, 66701
223-31D0 1902410011
13 M 1902 41 D8G

ALDIS MD,WILLIAM, 1123 S CRAWFORD, 667D1
190244DD26
20 M 19D2 44 00

BASHAM MD,JAMES J, 702 MEADOW LN, 66701
19D2370052
14 M 19D2 37 00

8ENAGE MD,JOHN F, 821 8URKE, 66701
223-220D 190258D065
32 M 1902 59 08G

8RAUN MO,EDWARD W, 71D WEST 8TH, 66701
223-3100 19D268D1D8
42 M 1902 69 U

8URKE MD,JAMES J, 710 W 8TH, 667D1
223-31DD 2834610089
35 M 2834 67 IM

CAMPBELL JR MD,WILLIAM R, 71D W 8TH, 66701
223-31DD 1902820287
55 M 1902 83 GS

CHDW MO,STANLEY Y, 1410 S EODY, 66701
24222390016
18 M 24222 63 DD

DUNLAP MD,PATRICK S, 710 W 8TH, 66701
223-31DD 30D577D521
53 M 3D07 79 D8G

DUNSHEE MD,CARLYLE M, 710 W 8TH, 667D1
223-31DD 19D2570248
32 M 19D2 57 GS

OUNSHEE MO, CHERYL A, 710 W 8TH, 66701
223-3100 1902790566
54 F 1902 82 IM

GETTLER MD, OEAN T, 710 W 8TH, 66701
223-3100 1902570311
31 M 1902 57 GS

GOOD MO, JAMES T, RR 1 BOX 140, 66701
2802450322
21 M 2802 62 00

GRANTHAM MO, HERBERT G, 701 W 8TH, 66701
223-2200 4501760582
49 M 4501 84 PATH

IRBY MO, PRATT, 124 S CRAWFORD, 66701
4705360222
13 M 4705 40 00

KERR MO, GERALD F, 701 W 8TH, 66701
223-6164 1902690626
44 M 1902 PATH

MCCANN MO, PATRICK E, 710 WEST 8TH, 66701
223-3100 1902590559
28 M 1902 60 IM

MCKENNA MO, MICHAEL J, 323 S JUOSON STE 120, 66701
223-3950 1902640611
38 M 1902 65 FP

NELSON MO, T EUGENE, 710 W 8TH, 66701
223-3100 1902680728
41 M 1902 69 FP

NICHOLS MO, ROBERT R, 902 HORTON, 66701
223-4100 2803760741
50 M 2803 77 FP

PARRIS MO, ROGER O, 902 S HORTON, 66701
223-4100 2803780768
51 M 2803 FP

PHELPS MO, OAVIO WAYNE, 902 HORTON, 66701
223-4100 1902761060
51 M 1902 77 FP

RAOUM MO, SANFORD R, RT 1 BOX 2058, 66701
223-6029 1642660400
40 M 1642 83 R

REEVES MO, C STEWART, 710 W 8TH, 66701
223-3100 1902630712
37 M 1902 71 IM

SPENCER MO, JOHN HAROLO, 902 S HORTON, 66701
223-3100 1902741051
47 M 1902 76 FP

THORNTON MO, JAMES L, 710 W EIGHTH, 66701
223-3100 1902801088
55 M 1902 83 PO

WEOOLE MO, DOUGLAS P, 902 S HORTON, 66701
223-3100 1720691791
43 M 1720 73 FP

FREDONIA — 316 (Southeast Kansas Medical Society)

8AYLES MO, HUGH G, PO BOX 30, 66736
1902520071
25 M 1902 52 00

RINOT MO, PHILLIP L, 432 N SEVENTH, 66736
378-3341 1902710911
45 M 1902 81 FP

SUMNER MO, RALPH N, PO BOX 537, 66736
378-2311 1902570914
31 M 1902 57 FP

GARDEN CITY — 316 (Southwest Kansas Medical Society)

ARROYO MO, ZEFERINO, 603 N 5TH, 67846
275-3700 74801670893
00 M 74802 75 GS

BAUGHMAN MO, MICHAEL J, 603 N 5TH, 67846
275-3700 1902820104
56 M 1902 87 ORS

BEGGS MO, OAVIO F, 603 N FIFTH, 67846
275-3700 1902640025
39 M 1902 65 IM

SIGLER MO, F CALVIN, 801 N FIFTH, 67846
275-2141 801570071
31 M 801 66 GS

BLUMBERG MO, LAWRENCE R, 603 N 5TH, 67846
275-3705
43 M 3841 88 OTO

BRUNO MO, JAMES W, 1133 KANSAS PLAZA, 67846
276-8201 4706660441
42 M 4706 73 FP

CALBECK MO, JOHN, 603 N FIFTH, 67846
275-3700 1902751692
50 M 1902 78 IM

EICHHORN MO, FRANK O, 80X 719, 67846
276-8132 1902560340
25 M 1902 56 FP

FENTON MO, ROBERT M, 1106 E HACKBERRY ST, 67846
1902540276
20 M 1902 54 00

FRY MO, LUTHER L, ST CATHERINE HOSP BOX 1928, 67846
275-7248 1902670269
41 M 1902 68 OPH

GILBERT II MO, JOHN H, 608 N FIFTH, 67846
275-3700 1902700427
46 M 1902 72 ORS

GREENWOOD MO, JAMES F, PO BOX 419, 67846
275-3700 1611650732
33 M 1611 67 FP

HANSEN MO, FRANK W, 603 N FIFTH, 67846
275-3700 1902761892
49 M 1902 78 PM

HUNSBERGER O.O., TERRY R, 602 N THIRO PO BOX 679,
67846
275-7128 2878730502
47 M 2878 74 FP

JACKSON MO, MICHAEL O, 603 N FIFTH, 67846
275-3700 4814760214
51 M 4814 82 FP

KOKSAL MO, TOM, 1133 E KANSAS, 67846
276-8201 1902760721
00 M 1902 77 FP

LE MO, CHUONG OUC, 912 N 5TH, 67846
275-4486 94101730381
48 M 94101 83 GP

MARSHALL MO, ROBERT J, 603 N 5TH, 67846
275-3774 1611773176
44 M 1611 0

MATHEWS O O, THOMAS G, 310 E WALNUT, 67846
275-9752 2878790122
00 M 2878 08G

MATTHEWS O.O., GEORGE E, 310 E WALNUT, 67846
275-9752 2878760151
48 M 2878 83 OBG

MELIN MO, BRUCE O, 608 N FIFTH, 67846
275-6111 5605770926
51 M 5605 82 PATH

MEYERS MO, STEPHEN, 603 N FIFTH, 67846
275-3700 2834740853
48 M 2834 77 PO

MILLER MO, ROBERT E, 603 N FIFTH, 67846
275-3700 4812550646
26 M 4812 75 GS

ROBERTS MO, SHELOON O, 603 N 5TH, 67846
275-3740 3840812854
55 M 3840 87 U

RODRIGUEZ MD, PAUL L, BOX 1729, 67846
275-6111 4706660726
39 M 4706 71 R

SHULL MD, MICHAEL W, 603 N 5TH, 67846
275-3700
00 M P0

TEARE MD, MAX E, 1007 OAVIS, 67846
276-7689 1902540934
28 M 1902 54 P

TRIOLO MD, PETER A, BOX 1729, 67846
275-7445 64933790361
43 M 64933 82 DR

TURNER MD, JOHN W, 1505 SPRUCE #45, 67846
1902390584
13 M 1902 39 00

TURNER MD, KENNETH B, 603 N 5TH, 67846
275-3780 401831258
57 M 401 87 FP

VACHAL MD, EVA, 608 N FIFTH, 67846
275-6111 1902740941
00 F 1902 77 PATH

WELCH MD, LAUREN A, 508 N 7TH, 67846
275-6111 1902711178
45 M 1902 72 GS

WELCH MD, MAURA S, 508 N 7TH, 67846
1902752991
50 F 1902 78 00

ZAUCHE MD, JAMES T, 603 N FIFTH, 67846
275-3730 2604792421
53 M 2604 86 P0

ZELLER MD, MYRON J, 603 N FIFTH, 67846
275-3700 1902641048
38 M 1902 65 OM

GARDEN PLAIN — 316 **(Sedgwick County Medical Society)**

REINHART MD, WULF, TAISSIA L, PO BOX 273, 67050
91302420012
19 F 91302 60 00

GARDNER — 913 **(Johnson County Medical Society)**

NIKINIA MD, MORTEZA, PO BOX 576, 66030
884-7822 51701670187
38 M 51701 78 GS

REECE MD, A THOMEN, PO BOX 576, 66030
884-7822 1902630691
37 M 1902 64 FP

GARNETT — 913 **(Anderson County Medical Society)**

DOUGHERTY MD, THOMAS M, 117 W 6TH, 66032
448-5421 1902550301
28 M 1902 55 FP

HARRIS JR MD, CLAIB B, 101 S OAK ST, 66032
1902440646
17 M 1902 44 00

LEITCH MD, DAVID A, GARNETT MED CTR 117 W 6TH, 66032
448-5421 1902630526
38 M 1902 64 FP

STEVENS MD, MILORED J, 202 W 4TH, 66032
448-5454 1902470600
23 F 1902 47 FP

GIRARD — 316 **(Crawford-Cherokee County Medical Society)**

HALL MD, WESLEY H, PO BOX 158, 66743
724-6154 1902570361
25 M 1902 57 FP

GLASCO — 913 **(Cloud County Medical Society)**

HARWOOD MD, CLAUDE J, PO BOX 428, 67445
1902550506
25 M 1902 55 FP

GODDARD — 316 **(Sedgwick County Medical Society)**

GODWIN MD, MARY K, PO BOX 560, 67052
794-8655 1902770506
53 F 1902 80 FP

LINO II MD, EDWARD J, 216 N MAIN PO BOX 560, 67052
794-8655 1902781036
53 M 1902 79 FP

GREAT BEND — 316 **(Barton County Medical Society)**

BEAHM MD, DONALD E, PO BOX 9, 67530
792-3626 1902710058
45 M 1902 72 OPH

BROWN MD, C REIFF, 3623 BROADWAY, 67530
792-1248
31 M 3901 ORS

BROZEK MD, JEFFREY E, 1309 POLK, 67530
792-5341 1902830371
57 M 1902 84 FP

CAVANAUGH MD, CLAIR J, C K M C 3515 BROADWAY, 67530
792-2617 1803470061
23 M 1803 52 R

CAVANAUGH MD, TERRENCE J, 3515 BROADWAY, 67530
792-2617 1902820309
55 M 1902 89 R

EVANS MD, WILLIAM R, 1912 LINCOLN, 67530
1902530271
25 M 1902 53 00

FIESER MD, CARL W, 3515 BROADWAY, 67530
792-2617 1902710376
45 M 1902 75 R

FLESKE MD, LEONARD T, 1514 K 96 HWY, 67530
792-4383 1902751994
49 M 1902 75 ORS

GATENO MD, JOSEPH, 1031 JACKSON, 67530
792-3908 64901500540
25 M 64901 76 OBG

HILL MD, LARY MICHAEL, 1309 POLK, 67530
793-8141 1902770646
51 M 1902 78 FP

JONES D O, ROBERT W, 3520 LAKIN #108, 67530
792-1344 2878680611
39 M 2878 GPVS

JONES MD, EDWARD L, 3515 BROADWAY, 67530
792-2511 1902610410
35 M 1902 62 PATH

KING MD, WILLIAM T, 3421 FOREST, 67530
793-3501 1902610461
35 M 1902 62 OBG

MCALLASTER MO,WENOALE E, 2111 FOREST, 67530
793-3591 1902540624
24 M 1902 54 GS

PECK MO,ROGER, PO BOX 1328, 67530
793-8429 1902810613
54 M 1902 84 IM

POLSON MO,ROBERT C, 80X A 1422 POLK, 67530
793-8414 1902420513
17 M 1902 42 OPH

PRESTON MO,RICHARD, PO BOX 1328, 67530
793-8429 1902690863
42 M 1902 70 IM

REPLOGLE MD,CHARLES 8, 2111 FOREST, 67530
793-3591 1902530726
27 M 1902 53 FP

RUIZ MO,CARLOS M, PO BOX 1348, 67530
792-3210 27501521006
25 M 27501 70 P

SCHUETZ MO,PERRY N, 1422 POLK 80X A, 67530
793-8414 1902710996
45 M 1902 72 OPH

SCHUKMAN MO,JAY S, 1309 POLK, 67530
792-5341 1902752737
50 M 1902 76 FP

SHIVEL MD,DAVIO G, 3523 FOREST, 67530
793-3523 1902551014
28 M 1902 55 FP

SMITH MO,PERRY MILTON, 1309 POLK, 67530
792-5341 1902771383
52 M 1902 78 FP

YOUNG MO,HWAN, 3515 800AOWAY, 67530
792-2617 58310730112
48 M 58310 82 OR

FRIESEN MO,DOUGLAS L, 327 CHESTNUT, 67056
835-2241 1902830681
57 M 1902 GS

GNAU MD,FREORIC B, 803 MAIN, 67056
835-2241 1902680329
42 M 1902 69 OTO

HARMS MD,WILMER A, 327 CHESTNUT, 67056
835-2241 1902560480
22 M 1902 56 OPH

HOOFFER MO,WILFORD O, 327 CHESTNUT, 67056
835-2241 1902550549
30 M 1902 55 TS

KIMMEL MD,KENNETH K, 327 CHESTNUT, 67056
835-2241 1902770808
52 M 1902 78 IM

MALDNE MO,EUGENE M, 327 CHESTNUT, 67056
835-2241 1902560684
23 M 1902 56 IM

RIZZA MO,ROBERT G, RTE 2 BOX 92C, 67056
835-2241
30 M 1201 65 PD

SHAH MO,SHARFUOOIN, 327 CHESTNUT, 67056
835-2241 70401582981
31 M 70401 71 IM

STOFFER MO,ROBERT P, 327 CHESTNUT, 67056
835-2241 1902480451
26 M 1902 48 IM

TEJANO MO,NEONILLO A, 327 CHESTNUT, 67056
835-2241 74808661032
43 M 74808 72 ORS

WEBER MO,ROY R, 327 CHESTNUT, 67056
835-2241 1902731225
46 M 1902 74 IM

GREENSBURG — 316 (Iroquois County Medical Society)

8RAOLEY MO,J ROOERICK, 502 S WALNUT, 67054
723-2127 1902470081
23 M 1902 47 FP

CANNATA MD,GENE, 502 S WALNUT, 67054
723-2127 1902790337
54 M 1902 81 FP

WALOORF JR MO,MELVIN H, 8RAOLEY-WALOORF 502 S WALNUT, 67054
723-2127 1902470685
23 M 1902 47 FP

HALSTEAD — 316 (Harvey County Medical Society)

AILLON MO,ALEJANORO J, 327 CHESTNUT, 67056
835-2241 26402630018
39 M 26402 74 TS

8EUGELSOIJK MO,HENRY PETER, 421 SPRUCE, 67056
835-2241 1902741433
49 M 1902 77 AK

8URNETT MO,A OEAN, 504 COLLEGE, 67056
1902520119
21 M 1902 52 00

DECKER MO,OONALO O, 915 W 4TH, 67056
1902560285
31 M 1902 56 00

EASTES MO,GARY DEAN, 327 CHESTNUT, 67056
835-2241 4812710180
44 M 4812 78 U

FEDOR MO,8AR8ARA, 327 CHESTNUT, 67056
835-2241
52 F 4814 88 IM

HANOVER — 913 (Northeast Kansas Medical Society)

WARREN MO,LINOA O, BOX 38, 66945
337-2214 1902700257
44 F 1902 71 FP

WARREN MO,ROGER O, BOX 38, 66945
337-2214 1902570990
31 M 1902 57 GS

HAYS — 913 (Central Kansas Medical Society)

ALBERS MD,ROBERT C, 2501 E 13TH STE 10, 67601
625-4224 1902770018
48 M 82 IM

APPLEGATE JR MO,FRANCIS R, 1010 DOWNING, 67601
628-8218 1902550026
30 M 1902 55 OPH

8AUER MO,RICHARD D, 1517 E 27TH, 67601
625-0044 1902800073
54 M 1902 81 08G

8OWERMAN MD,ROBERT F, BOX 833, 67601
628-6718 1102831582
44 M 1102 85 R

8ULA MD,RALPH E, 3209A WILLOW, 67601
1902370117
12 M 1902 37 00

CARLSON MO,EARL V, ORAWER 430, 67601
628-8221 3005560071
31 M 3005 65 ORS

CECIL III MO,JOHN, BOX 833, 67601
625-6521 4804690145
43 M 4804 72 R

COOK O O, RANOF A, 105 W 13TH, 67601
628-3608 2878810247
52 M 2878 IM

COX MO, ROBERT H, 2507 CANTERBURY RO, 67601
628-3051 1902701300
43 M 1902 71 PO

OOS MO, J RICHARD, 1517 E 27TH, 67601
625-0044
46 M 401 OBG

OYCK MO, ERIC LEE, 1605 OAKMONT, 67601
628-6151 1902770433
52 M 1902 B0 FP

EOOY MO, VICTOR M, 105 W 13TH, 67601
625-2551 1902550328
29 M 1902 56 GS

FENT II MO, LEE S, 2507 CANTERBURY RO, 67601
628-3051 1902700354
44 M 1902 70 PO

GATSCHE MO, TIMOTHY P, 2712 PLAZA AVE, 67601
625-3665 1902850577
50 M 1902 87 P

GRAY MO, PATRICK W, 105 W 13TH, 67601
628-3608 3901821959
55 M 3901 83 IM

HAIGLER MO, JAMES P, 217 W 24TH, 67601
3006390322
13 M 3006 39 00

HALLING MO, L WILLIAM, 1300 EAST 13TH, 67601
625-5646 5002570175
27 M 5002 68 PATH

HUTCHISON MO, GLEN C, 3200 COUNTRY LANE, 67601
1902500312
21 M 1902 50 00

KANE JR MO, WILLIAM M, 2503 CANTERBURY RO, 67601
628-3245 1001540340
27 M 1001 62 OBG

KELLY MO, A CHRISTINE, 1517 E 27TH, 67601
625-8553 2846770219
49 F 2846 81 GS

KIFER MO, C JAMES, BOX 833, 67601
625-6521 1902710562
45 M 1902 72 OR

LASLEY MO, MICHAEL B, 2501 EAST 13 STE 7, 67601
628-3217 1902710627
45 M 1902 76 GS

MANN MO, JOHN B, 2507 CANTERBURY RO, 67601
628-3051
59 M 1902 90 PO

MATTICK MO, IRVIN H, 2900 COUNTRY LANE, 67601
2802431077
18 M 2802 54 00

MCOONALO MO, KEVIN R, PO BOX 1176, 67601
628-6014 3006780562
52 M 3006 83 U

MCOONALO MO, THOMAS L, 1010 OOWNING AVE, 67601
628-8218 1902841217
53 M 1902 85 OPH

MYRICK MO, MICKEY C, 2509 CANTERBURY RD, 67601
628-6151 3005740702
42 M 1803 FP

NEIL MO, ROY N, 105 W 13TH, 67601
628-8341 3005650525
38 M 3005 71 PATH

NEWCOMB MO, WARO M, 1300 E 13TH, 67601
625-5646 3005710633
47 M 3005 75 PATH

NOOROHOK MO, LYLE J, 1300 E 13TH, 67601
625-5646 1902831386
56 M 1902 84 PATH

OOM MO, DANIEL G, 1300 E 13TH, 67601
625-5646 1102841723
48 M 1102 PATH

RAJEWSKI MO, RICHARD L, 2509 CANTERBURY RO, 67601
628-6151 1902761086
51 M 1902 77 FP

RAMSEY MO, JOE A, 2501 E 13TH, 67601
625-4224 1902810630
55 M 1902 IM

RICHARDS MO, OALLAS LEE, 2501 E 13TH STE 10, 67601
625-4224 1902742359
49 M 1902 76 IM

RUTNGAMLUG MO, LUECHA, 105 W 13TH, 67601
628-6175 89101680216
40 M 89101 76 GS

SILER MO, EUGENE T, 3603 FAIRWAY OR #A, 67601
1902520607
24 M 1902 52 00

STAOALMAN MO, ROSS EUGENE, 2501 E 13TH STE 7, 67601
628-3217 1902731101
47 M 1902 74 GS

STUMP MO, HARL G, 105 W 13TH, 67601
625-2551 1902650926
39 M 1902 66 GS

TAN MO, LOUROES R, 208 E 7TH, 67601
628-2871 74809670248
34 F 74811 88 P

VILLARANTE MO, FE T, 201 E 7TH, 67601
628-8251 74807630800
28 F 74807 PM

WATTS MO, HARRY E, 1010 OOWNING, 67601
628-8218 702540712
27 M 702 60 OPH

WEBER MO, WALLACE N, 2707 VINE STE 10, 67601
628-3231 1902691061
43 M 1902 70 0

WERTH MO, DARRELL O, PO BOX 1176, 67601
628-6014 1902753008
50 M 1902 76 U

WIEGMAN MO, HUGH A, PO BOX B33, 67601
625-6521 1803600992
34 M 1803 R

WILCOX JR MO, HOWARD L, PO ORAWER 430, 67601
628-8221 1902701237
44 M 1902 71 ORS

HAYSVILLE — 316 (Sedgwick County Medical Society)

MAGSALIN MO, ROMULO O, 141 N MAIN, 67060
529-2151 74808661792
40 M 74808 78 PATH

HERINGTON — 913 (Dickinson County Medical Society)

BUSTOS MO, JONAS G, 1005 NORTH B, 67449
258-3705 74810680478
41 M 74810 76 GS

HESSTON — 316 (Harvey County Medical Society)

OIENER MO, CLAYTON H, 101 W VESPER, 67062
327-4122 1902540225
18 M 1902 54 GS

YOOPER MO, VERNON E, ROUTE #1 BOX 136A, 67062
283-2400 4812611017
31 M 4802 68 P

HIAWATHA — 913
(Northeast Kansas Medical Society)

OUCKETT MO, THOMAS G, 201 MIAMI, 66434
1902340111
10 M 1902 34 00

HAYES MO, KRIS A, 200 OELAWARE, 66434
742-2131 1902790825
54 M 1902 81 GS

LARSON MO, OELBERT L, 314 OREGON, 66434
742-2161 1803640510
30 M 1803 66 FP

LUNOQUEST MO, OAVIO E, 300 UTAH, 66434
742-2131 1902831076
54 M 1902 86 PATH

MEIOINGER MO, RAY, 111 S FOURTH, 66434
742-2135 3005320410
03 M 3005 32 FP

SEARIGHT MO, LOWELL R, 202 S 6TH, 66434
742-3523 1902810915
48 M 1902 88 FP

SINNING MO, GARY, 314 OREGON, 66434
742-2161 1902741778
49 M 1902 77 FP

HILL CITY — 913
(Central Kansas Medical Society)

REDOY MO, B N, 114 E WALNUT, 67642
674-2191 49557670024
38 M 49557 80 RT

REDOY MO, P JAGANNAOHA, 80 WALNUT OR, 67642
674-2191 49511660024
42 M 49511 73 GS

HILLSBORO — 316
(Marion County Medical Society)

ENS MO, GERHARD GEORGE, 405 S WILSON, 67063
1902550379
20 M 1902 55 00

ENS MO, PETER O, 209 S MAIN, 67063
947-3671 1902510164
14 M 1902 51 FP

HOISINGTON — 316
(Barton County Medical Society)

MOORE MO, ROBERT, 814 NORTH ELM, 67544
653-2151 3901530504
22 M 3901 53 FP

HOLTON — 913
(Shawnee County Medical Society)

CHAVEZ MO, CARLOS A, 418 W 5TH, 66436
364-3116 64914560011
33 M 64914 GP

HUTCHINS MO, JOEL R, 418 W 5TH PO BOX 466, 66436
364-2126 1902830908
49 M 1902 84 FP

RYAN O O, PHILIP A, 418 W 5TH, 66436
364-3116 2878880369
55 M 2878 89 FP

HORTON — 913
(Northeast Kansas Medical Society)

WALTON MO, PHILIP O, 1903 EUCLIO, 66439
486-2828 1902630887
32 M 1902 64 FP

HOXIE — 913
(Northwest Kansas Medical Society)

NEUENSCHWANOER MO, JOHN, 1041 15TH BOX 25B, 67740
675-3292 2802510619
26 M 2802 52 FP

NEUENSCHWANOER MO, JOHN RANO, PO BOX 25B, 67740
675-3292 1902720878
47 M 1902 73 FP

HUMBOLDT — 316
(Southeast Kansas Medical Society)

LONG MO, EDWARD E, B18 BRIDGE ST, 66748
1902500401
21 M 1902 50 00

NEEF MO, OUG STEVENS, 202 S NINTH, 66748
473-2275 2803840761
57 M 2803 85 FP

HUTCHINSON — 316
(Reno County Medical Society)

AOAMS JR MD, MARCUS W, 2101 N WALORON, 67502
663-6121 3901590027
33 M 3901 67 PO

ALBRIGHT MO, JEROLO O, 2101 N WALORON, 67502
663-6121 1902660026
39 M 1902 67 FP

BARKER MO, STANTON L, 2101 N WALORON, 67502
663-6121 1902790108
54 M 1902 82 FP

BAUER MO, THOMAS A, 2101 N WALORON, 67502
663-6121 1902670030
41 M 1902 68 IM

BLANK MO, JOHN N, ROUTE 5 BOX 220, 67502
1902380058
07 M 1902 38 00

BORRA MO, MARIO J, 69 WILLOWBROOK, 67502
2401470134
24 M 2401 54 00

BOS MO, NORMAN C, 2606 N VANBUREN, 67501
1611470211
24 M 1611 61 00

CASEY MO, JAMES L, 1100 N MAIN, 67501
669-6715 3005690080
42 M 3005 77 PO

CESARETTI MO, LUKE S, 2101 N WALORON, 67502
669-2500
52 M 3401 89 OR

COKER JR MO, GRAOY N, 1100 N MAIN, 67501
669-6690 1201540166
25 M 1201 08G

CULLAN MO, GEORGE E, 2101 N WALORON, 67502
669-2500
53 M 3006 08G

OEPENBUSCH MO, FRANCIS L, 1708 E 23RD, 67502
663-7187 1902650179
38 M 1902 66 OPH

ECKART MO,OE MERLE E, 2517 E 45TH, 67502
1902400181
14 M 1902 40 00

FALTER MO,RICHARD T, 1708 E 23RD ST, 67502
663-7187 1902670200
38 M 1902 68 OPH

FOSS MO,DANIEL C, 2101 N WALORON, 67501
663-6121 1902690375
43 M 1902 70 GE

FRIESEN MO,DOUGLAS A, 1701 E 23RD, 67502
665-2107
55 M 1902 83 AN

GRAVES MO,KATHRYN, 2101 N WALORON, 67502
663-6121 1902742146
49 F 1902 76 0

GRINIS MO,GEOAS M, 2101 N WALORON, 67502
669-2500
56 M 2834 U

HALE MD,RALPH, 37 LINKSLAND OR, 67501
1902460183
18 M 1902 46 00

HEORICK MO,KENNETH E, 2101 N WALORON, 67502
663-6121 1902530360
27 M 1902 53 GS

HOLZEMAN MO,WALLACE O, 2101 N WALORON, 67502
663-4406 1902540471
28 M 1902 54 ORS

JARROTT MO,JOHN B, 1100 N MAIN, 67501
669-6690 1902400300
16 M 1902 40 ORS

KENNING MO,GERALD F, 17 BEECHWOOD LN, 67502
669-8917 3006820483
54 M 3006 85 AN

KLOSTERHOFF MO,BRUCE E, 1715 E 23RD, 67502
662-6041 1611711073
45 M 1611 72 P

LESSER MO,DANE A, 2101 N WALDRON, 67502
663-6121 3901750784
49 M 3901 81 U

LETTNER MD,HANS T, 80X 159, 67504
40716480170
23 M 40716 64 00

MATLOCK MO,MARK S, 2101 N WALORON, 67502
663-6121 3901821011
56 M 3901 87 D

MCCOY MO,CHARLES T, 100 N MAIN STE 813, 67501
1902410402
16 M 1902 41 00

MCMULLEN MO,JOSEPH E, 2101 N WALDRON, 67502
663-6121 1902620563
33 M 1902 63 GS

MILLS MD,STEPHEN C, 1100 N MAIN, 67501
663-2151
44 M 3901 87 DR

NANNEY MO,GREGORY O, 2101 N WALDRON, 67502
663-6121 3901811210
55 M 3901 86 HEM

NORTH MD,MARGARET JOHNSON, 2020 N WALDRON, 67502
689-9344 4804800854
54 F 4804 D

NUNEMAKER MO,MARION E, PO BOX 1129, 67504
1902460451
21 M 1902 46 00

OPENSHAW MD,CALVIN R, 1824 N MAIN, 67502
4901440251
21 M 4901 53 00

PATTERSON MD,MICHAEL S, 1701 E 23RD, 67502
665-2580
43 M 1902 70 PM

PEASE MD,GARY L, 1712 E 23RD, 67502
662-4458 3005670585
41 M 3005 77 OTO

PERKINS MO,JACK L, 9 PRAIRIE OUNES OR, 67502
1902530645
24 M 1902 53 00

SAYLOR MO,RANDOL L, 2101 N WALORON, 67502
663-6121 1720803247
53 M 1720 85 OPH

SHAW MO,JAMES W, PO BOX 1646, 67504
662-7801 1902650829
40 M 1902 66 PATH

SHEARS MD,ROBERT N, 1100 N MAIN, 67501
669-6715 1902441359
20 M 1902 44 PO

SMITH MO,THOMAS WILLIAM, 1712 E 23RD, 67502
662-4458 1643680722
43 M 1643 80 OTO

STAFFORD MD,ROBERT W, 2101 N WALORON, 67502
663-6121 2101691091
43 M 2101 74 IM

STOUT MO,JAMES M, 2101 N WALORON, 67502
663-6121 1902551111
29 M 1902 55 FP

SUMNER MO,JOYCE R, 3011-8 NUTMEG LN, 67502
1902510768
26 F 1902 51 00

SUMNER MO,MARION M, 3011 8 NUTMEG, 67502
1902520674
26 M 1902 52 IM

TAYLOR MO,ELWYN J, 1100 N MAIN, 67501
669-6690 1902610797
34 M 1902 62 FP

WEIOENSAUL MO,O N, 2101 N WALORON, 67502
663-6121 1902752982
50 M 1902 76 IM

WILEY MD,CLARENCE L, 100 N MAIN STE 521, 67501
663-8152 4301770613
50 M 4301 86 0

WOODS MD,DENNIS D, 2101 N WALORON, 67502
663-6121 1902861994
60 M 1902 87 IM

WORTMAN MO,JACK A, 2101 N WALORON, 67502
663-6121 1902620938
34 M 1902 63 IM

INDEPENDENCE — 316 (Southeast Kansas Medical Society)

ATWOOD MD,LARRY C, 800 W MYRTLE PO BOX 314, 67301
331-8610 1902800057
54 M 1902 80 FP

BAIR MO,ALBERT E, PO BOX 925, 67301
1902440069
16 M 1902 44 00

BARBERA MO,PORTER E, 700 E 8TH, 67301
4707460046
19 M 4707 47 00

ELLIS MO,BOBBY J, PO BOX 1043, 67301
331-7390 1902770450
51 M 1902 89 IM

EMPSON MO,CHARLES L, PO BOX 848, 67301
331-6019 1902680256
37 M 1902 68 FP

KNUTH MO,KENNETH L, 2900 TERRA VISTA, 67301
331-2200 1902500371
22 M 1902 50 R

MASON MD,WAYNE E, PO BOX 388, 67301
331-2200
36 M 1902 R

MYERS JR MO,EARL B, BOX 548, 67301
331-3420 2803640397
32 M 2803 69 GS

STACEY MO,KIMBALL, 209 N SIXTH, 67301
331-6350 1902792089
00 M 82 IM

IOLA — 316 (Allen County Medical Society)

OICK MO,WILLIS G, 4 EAGLE OR, 66749
512410138
13 M 512 71 00
LENSKI JR MO,FRANCIS X, % M LENSKI 703 COTTONWOOD, 66749
1606500978
26 M 1606 50 00
MYERS MO,W EUGENE, 401 E JACKSON, 66749
1902460418
12 M 1902 46 00
SINGER MO, GLEN D, 201 WEST, 66749
365-3115
49 M 1902 FP
WOLFE MO,BRIAN O, 201 WEST ST, 66749
365-3115 1902792135
00 M 1902 FP

JUNCTION CITY — 913 (Geary County Medical Society)

BOLLMAN MO,CHARLES S, PO BOX 397, 66441
762-4575 3901660122
41 M 3901 74 GS
BRETHOUR MD,LESLIE J, 207 S EVEO, 66441
238-4151 3006390136
13 M 3006 41 FP
CRAIG MO,THOMAS A, 1106 ST MARYS RO STE 102, 66441
762-4255 1902780412
53 M 1902 81 IM
MACE MO,RONALO O, 1106 S ST MARYS RO STE 305, 66441
762-4884 3901740738
42 M 3901 75 FP
O'DONNELL MO,HARRY E, 703 WEST CHESTNUT, 66441
4113420761
14 M 4113 42 00
SCOTT MO,ALEX, 835 W 5TH PO BOX 1087, 66441
238-3760 5605480448
23 M 5605 50 FP

KANSAS CITY — 913 (Wyandotte County Medical Society)

ALEXANDER JR MO,L GEORGE, UKMC 39TH & RAINBOW, 66103
588-2840 3607731071
48 M 3607 86 COTS
ALEXANDER MO,CHARLES E, TWO GATEWAY CENTER #917, 66101
321-6670 401700013
43 M 401 74 OBG
ALGIE MO,WILLIAM H, 7850 FREEMAN, 66112
1902270015
02 M 1902 27 00
ALLEGRE MO,ANN, 1969 N 33RD, 66104
321-0341 1902771715
50 F 1902 78 IM
ALLEN JR MO,WILLIAM R, 9201 PARALLEL, 66112
334-4110 1902460027
46 M 1902 80 R
ALLEN SR MO,WILLIAM R, 9201 PARALLEL, 66112
334-4110 1902460027
22 M 1902 R

ARAKAWA MO,KASUMI, KUMC 39TH & RAINBOW, 66103
588-6670 57249530010
26 M 57211 64 AN

ASHER MO,MARC A, KUMC 39TH & RAINBOW, 66103
588-6130 1902620024
36 M 1902 63 ORS

AUSTENFEL MO,MARK S, 39TH & RAINBOW, 66103
588-7566 1902830100
53 M 1902 89 U

BAKER MO,GARY L, KUMC 39TH & RAINBOW, 66103
588-6137
51 M 2802 89 PS

BATNITZKY MO,SOLOMON, KUMC 39TH & RAINBOW, 66103
588-6835 83601640077
40 M 83601 77 OR

BAUGH MO,REGINALD F, 39TH & RAINBOW, 66103
588-6700 2501810099
56 M 2501 88 OT0

BAXTER MO,KIRKMAN G, 39TH & RAINBOW, 66103
588-6810 1902830207
57 M 1902 85 OR

BECKER MO,LESLIE E, 600 NEBRASKA STE 104, 66101
342-4010 1003460033
23 M 1003 65 U

BENSON MO,KIRK T, KUMC 39TH & RAINBOW, 66103
588-6670 1902790183
54 M 1902 80 AN

BERGIN MO,JAMES J, BETHANY MEO CTR 51 N 12TH, 66102
281-8767 2407540045
28 M 2407 76 IM

BISE MO,ROGER N, 39TH & RAINBOW, 66103
588-6136 1902830291
53 M 1902 83 PS

BOLINGER MO,ROBERT E, KUMC 39TH & RAINBOW, 66103
588-6022 1902430110
19 M 1902 43 ENO

BOSILEVAC MO,FREO N, 155 S 18TH, 66102
342-4843 1902440174
16 M 1902 44 OPH

BRACKETT JR MO,CHARLES E, 460 TERRACE TRAIL EAST, 66106
3501440123
20 M 3501 52 00

BRILLHART MO,MAXINE T, 4540 COUNTY LINE RO, 66106
1902500096
15 F 1902 50 00

BROOKS MO,CHARLES L, 8919 PARALLEL STE 331, 66112
299-2400 1902790272
54 M 1902 85 GE

BROOKS MO,WILLIAM HENRY, 155 S 18TH STE 101, 66102
371-4343 1902742219
49 M 1902 78 R

CALOERON MO,JAIME, 4631 ORVILLE STE 201, 66102
287-5556 26401660231
39 M 26401 75 CO

CALKINS MO,JOHN W, KUMC 39TH & RAINBOW, 66103
588-6236 1902760250
51 M 1902 76 OBG

CAMERON MO,WILLIAM J, KUMC 39TH & RAINBOW, 66103
588-6246 2501540261
29 M 2501 62 OBG

CARPENTER MO,PAUL R, 155 S 18TH STE 290, 66102
371-6800 1902500126
24 M 1902 50 GS

CERVENY MO,CARLA J, 39TH & RAINBOW FP OEPT, 66103
588-1908 702840236
58 F 702 85 FP

CHAFFEE MO,TERRY L, 39TH & RAINBOW, 66103
588-6670 1902790361
53 M 1902 AN

CHALIAN MO,ALEXANDER R, 2648 MINNESOTA, 66102
3509370141
03 M 3509 57 00

CHANG MO,C H JOSEPH, KUMC 39TH & RAIN80W, 66103
588-6807 58301530011
29 M 58301 71 R

CHERNOFF MO,MARY A, 8929 PARALLEL PKWY, 66112
596-4100 1902831181
56 F 1902 84 AN

CHIN MO,TOM O, KUMC 39TH & RAIN80W, 66103
588-2772 2501460233
22 M 2501 73 ID

CHO MO,CHENG T, KUMC 39TH & RAIN80W, 66103
588-6336 38501620081
37 M 38501 74 PO

CHONKO MO,ARNOLO M, KUMC 39TH & RAIN80W, 66103
588-6076 3840690244
43 M 3840 74 NEP

CLAWSON MO,O KAY, KUMC 39TH & RAIN80W, 66103
588-1400 2401520239
27 M 2401 83 ORS

COALE MO,LLOYD H, 5020 GREELEY, 66104
1902430209
13 M 1902 43 00

CORBIN MO,MURRAY O, 8919 PARALLEL STE 416, 66112
299-8000 1902650152
39 M 1902 66 CO

COWLES MO,TRACY A, KUMC 39TH & RAIN80W, 66103
588-6249 1902830533
56 F 1902 83 08G

COX III MO,IRA L, 155 S 18TH, 66102
371-4343 1902680183
43 M 1902 69 OR

COX MO,GLENNON G, KUMC 39TH & RAIN80W, 66103
588-6800 1902800243
55 M 1902 84 OR

CREGITOR MO,MORTON C, KUMC 39TH & RAIN80W, 66103
588-1265 3501470171
23 M 3501 86 IM

CROCKETT MD,CHARLES A, 155 S 18TH, 66102
342-2200 401440178
19 M 401 49 OPH

CULP MO,LOUIS M, 8919 PARALLEL PKWY STE 208, 66112
334-6801 1902530211
24 M 1902 53 FP

DAHL MO,OAVIO C, 51 N 12TH, 66102
281-8881 4101801646
59 M 1645 90 EM

DANIELS MO,HERBERT A, 155 S 18TH STE 160, 66102
321-1161 4002750215
46 M 4002 86 ENT

DARR MO,RICHARD B, PO 80X 2923, 66201
676-2097 3401700047
42 M 3401 72 IM

DAVIS MO,CHRISTOPHER G, 8010 PARALLEL PKWY, 66112
299-6075 1902390118
09 M 1902 40 FP

DEMOTT MD,WAYNE R, PROVIDENCE-ST MGT HLTH CT, 66112
334-2500 4002590102
34 M 4002 68 PATH

OUJOYNE MD,CARLOS A, KUMC 39TH & RAINBOW, 66103
588-6061 13201610405
37 M 13201 73 PA

OULIN MO,JOSE I, 6013 LEAVENWORTH RD, 66104
299-0089 84711750061
51 M 84711 81 IM

DUNN MO,MARYIN I, KUMC 39TH & RAINBOW, 66103
588-6015 1902540241
27 M 1902 54 CO

EMAMI MO,A88AS, KUMC 39TH & RAIN80W, 66103
588-6340 51703710135
45 M 51703 PO

ERENBERG MO,ALLEN, KUMC 39TH & RAIN80W, 66103
588-6339
43 M 1611 PO

ESTES MO,NORMAN C, KUMC 39TH & RAIN80W, 66103
588-6150 1902710350
40 M 1902 84 GS

EUBANKS MO,KIMBER L, 39TH & RAIN80W, 66103
588-6670 1902850437
57 M 1902 89 AN

EVANS MO,RICHARD G, KUMC 39TH & RAIN80W, 66103
588-3670 511750199
35 M 511 85 TR

FINLEY MO,BRENT E, KUMC 39TH & RAIN80W, 66103
588-6290 1902790639
52 M 1902 81 MFM

FORET MO,JOHN O, KUMC 39TH & RAIN80W, 66103
588-6147 1602530228
26 M 1602 59 U

FORSTER MO,JAMESON, 39TH & RAIN80W, 66103
588-6183 4101801646
52 M 4101 89 GS

FOSTER MO,FRANCES J, 4601 ORVILLE STE 12, 66102
287-2226 4707670351
41 F 4707 68 OPH

FOX MO,DEANNA K, KUMC 39TH & RAIN80W, 66103
588-6670 1902741531
48 F 1902 76 AN

FRANCISCO MO,W OAVIO, KUMC 39TH & RAIN80W, 66103
588-6129 1902440531
21 M 1902 44 ORS

FRENKEL MO,JACOB K, KUMC 39TH & RAIN80W, 66103
588-7075 502460471
21 M 502 86 PATH

GABA MO,JAMES E, 4631 ORVILLE STE 103, 66102
596-2774 4706540542
30 M 4706 86 GS

GAFFNEY MO,GARY R, 39TH & RAIN80W, 66103
588-6454 1803810440
55 M 1803 86 P

GILHOUSEN MO,FREDERIC M, 1029 N 32ND, 66102
281-5252 1902660336
40 M 1902 67 ORS

GILLILANO MO,CRAIG L, 39TH & RAIN80W, 66103
588-6670 1902830720
56 M 1902 86 AN

GOLLUB MO,STEVEN B, KUMC 39TH & RAIN80W, 66103
588-6015 1205780404
53 M 1205 80 CO

GOODWIN MO,ONALD W, KUMC 39TH & RAIN80W, 66103
588-6402 1902640319
31 M 1902 76 P

GOTO MO,HIROSHI, KUMC 39TH & RAIN80W, 66103
588-6670 57241670025
42 M 57241 76 AN

GRANTHAM MO,JAREO J, KUMC 39TH & RAINBOW, 66103
588-6075 1902620300
36 M 1902 69 NEP

GREENBERGER MO,N J, KUMC 39TH & RAIN80W, 66103
588-6001 3806590249
33 M 3806 72 IM

GREENE MO,LAWRENCE S, 6013 LEAVENWORTH RD, 66104
299-2069 3506540231
33 M 3506 81 GE

GRUENDEL MO,RICHARD A, 1029 N 32ND, 66102
281-5252 1902550441
29 M 1902 55 ORS

GRUENDEL MO,VIRGINIA T, 6926 GARFIELD, 66102
299-2787 1902550450
30 F 1902 55 PO

HALL III MO,THOMAS B, KUMC 39TH & RAIN80W, 66103
588-1330 2802690315
43 M 2802 78 IM

HANCOCK MD,ALAN C, 9201 PARALLEL, 66112
299-1474 1902640343
35 M 1902 65 FP

HARA MO, GLENN S, KUMC 39TH & RAINBOW, 66103 588-6241 514690278 43 M 514 73 OBG	JACOBS MO, OAVIO S, 8929 PARALLEL PARKWAY, 66112 596-4725 2501560785 31 M 2501 65 PATH
HART MO, KELLY Z, 155 S 18TH, 66102 371-4343 1902752133 50 M 1902 76 DR	JAHANIAN MO, OARYOUSH, 8919 PARALLEL PKWY #304, 66112 334-5420 51701640318 40 M 51701 74 OBG
HARWOOD MO, MICHAEL R, 8919 PARALLEL STE 206, 66112 788-7099 1611811311 55 M 1611 87 IM	JAYARAM MO, MARANOAPALLI R, 8919 PARALLEL STE 416, 66112 299-8000 49509650135 42 M 49509 73 PO
HENORICKS MD, K OWIGHT, 8919 PARALLEL PKWY STE 226, 66112 299-8800 1611791212 53 M 1611 80 OPH	JEWELL MO, WILLIAM R, KUMC 39TH & RAINBOW, 66103 588-6112 1611610838 35 M 1611 72 GS
HENNEY MO, JANE E, KUMC 39TH & RAINBOW, 66103 588-1440 1720730916 47 F 1720 85 IM	JOHNSON MO, OAVIO B, 4601 ORVILLE #5, 66102 596-1313 54 M 2002 FP
HERMRECK MO, ARLO S, KUMC 39TH & RAINBOW, 66103 588-7232 1902650390 38 M 1902 66 GS	JONES JR MD, HERMAN H, 600 NEBRASKA, 66101 342-4010 4707540287 25 M 4707 56 GS
HIEBERT MO, JOHN M, KUMC 39TH & RAINBOW, 66103 588-6143 2405670341 42 M 2405 80 PS	KALIVAS MO, JAMES, 39TH & RAOMBPW, 66103 588-6028 502630423 38 M 502 70 O
HILO MD, PETER G, 39TH & RAINBOW ANES OEPT, 66103 588-6670 4802830772 57 M 4802 89 AN	KEPES MO, JOHN J, KUMC 39TH & RAINBOW, 66103 588-7169 47301520146 28 M 47301 62 PATH
HINTHORN MO, DANIEL R, 39TH & RAINBOW, 66103 588-6035 1902670404 41 M 1902 68 IO	KHARE MO, PRATIBHA, 8929 PARALLEL PKWY, 66112 596-4100 49547710028 47 F 78 AN
HOAOLEY MO, WILLIAM O, KUMC 39TH & RAINBOW, 66103 588-3974 1902560536 31 M 1902 56 IM	KIM MO, JONG M, UKMC 39TH & RAINBOW, 66103 588-6670 58303640221 40 M 58302 74 AN
HOOGSON MO, JAMES F, 8919 PARALLEL STE 416, 66112 299-8000 4813770585 45 M 4813 81 OBG	KINOSCHER MO, JAMES O, 39TH & RAINBOW, 66103 588-6670 1902820945 55 M 1902 83 AN
HOLOCRAFT MO, JACQUELYNE, 155 S 18TH #160, 66102 321-1161 2105630487 36 F 2105 68 ENT	KING MO, CHARLES R, KUMC 39TH & RAINBOW, 66103 588-6248 1902720711 47 M 1902 73 OBG
HOLLAOAY MO, FRANK P, 39TH & RAINBOW, 66103 588-6107 3006801250 53 M 64914 88 NS	KLEM MO, STEPHEN A, KUMC 39TH & RAINBOW, 66103 588-6379 1902830207 57 M 2802 89 PO
HOLLOWELL MO, JOSEPH G, KUMC 39TH & RAINBOW, 66103 588-5906 4501560231 32 M 4501 70 PD	KOVAC MD, ANTHONY L, KUMC 39TH & RAINBOW, 66103 588-6670 1902770816 52 M 1902 81 AN
HOLMES MO, FREDERICK F, KUMC 39TH & RAINBOW, 66103 588-6005 5404570350 32 M 5404 69 IM	KRAKER MO, OAVIO P, KUMC 39TH & RAINBOW, 66103 588-6131 56 M 1602 88 ORS
HOLMES MO, GRACE E, KUMC 39TH & RAINBOW, 66103 588-2773 5404570368 32 F 5404 68 PO	KRANTZ MO, KERMIT E, KU MEO CENTER, 66103 588-6201 1606480799 23 M 1606 59 OBG
HOLMES MO, JOHN A, 155 S 18TH, 66102 621-1188 1902770654 47 M 1902 78 IM	KWEE MO, SIOE T, 8929 PARALLEL PKWY, 66112 596-4723 1720630750 36 F 1720 70 PATH
HUERTER MO, QUENTIN C, 8919 PARALLEL STE 226, 66112 299-8800 1902590401 31 M 1902 60 OPH	KYNER MD, JOSEPH L, 39TH & RAINBOW, 66103 588-6048 1902600384 34 M 1902 61 IM
HUTCHISON MO, MICHAEL C, 39TH & RAINBOW ANES DEPT, 66103 588-6670 1902780854 53 M 1902 80 AN	LAING MO, ROBERT R, 155 S 18TH, 66102 371-4301 1643610431 37 M 1643 62 GE
IBARRA MO, RICHARD C, 754 PACIFIC, 66101 64902570258 26 M 64902 63 OO	LAWWILL MO, THEODORE, KUMC 39TH & RAINBOW, 66103 588-6605 4705610296 37 M 4705 80 OPH
ILIOPOULOS MO, JOHN I, KUMC 39TH & RAINBOW, 66103 588-6197 41801690341 44 M 41801 81 GS	LEE MO, JAE M, 155 S 18TH #290, 66102 371-6800 58302650118 40 M 58302 74 GS
INGRAM MO, JOHN E, 1428 S 32ND, 66106 384-1630 3006560317 24 M 3006 57 FP	LEE MO, KYO R, KUMC 39TH & RAINBOW, 66103 588-6800 58302590107 33 M 58302 73 R
ISERN MO, HENRY J, 4601 ORVILLE STE 12, 66102 287-2226 84706780032 43 M 84706 OPH	LEVINE MO, ERROL, KUMC 39TH & RAINBOW, 66103 588-6800 83601640191 41 M 83601 77 DR
	LIEBERMAN MO, BRUCE IRWIN, KUMC 39TH & RAINBOW, 66103 588-5919 3843740218 49 M 3819 79 PD

LINOSLEY MO,CAROL 8, KUMC 39TH & RAINBOW, 66103
588-6325 5404680848
41 F 5404 74 PO

LINN MO,KATHERINE P, 8919 PARALLEL STE 440, 66112
299-2229 1902771146
52 F 1902 80 OBG

LIU MO,ALBERT T, 8919 PARALLEL STE 322, 66112
788-9797 1902791171
49 M 1902 80 OBG

LIU MO,CHIEN, UKMC MEO CTR 39TH & RAINBOW, 66103
588-6035 24217470036
21 M 24217 59 IO

LUKERT MO,BARBARA P, KUMC 39TH & RAINBOW, 66103
588-6048 1902600422
34 F 1902 61 ENO

MAINSTER MO,MARTIN A, KUMC 39TH & RAINBOW, 66103
588-6600 4802752046
42 M 4802 84 OPH

MALLORY MO, JOHN A, 10600 QUIVIRA, STE 210, 66215
541-3340 2803710476
43 M 2803 75 IM

MANGOLO MO,JOEL VOYCE, KUMC 39TH & RAINBOW, 66103
588-6670 1902760811
50 M 1902 77 AN

MANI MD,MANI M, KUMC 39TH & RAINBOW, 66103
588-6142 49527590131
37 M 49527 74 PS

MARTIN MO,JOSEPH P, 8919 PARALLEL PKWY STE 206, 66112
334-1515 1902742294
49 M 1902 78 IM

MARTIN MO,NORMAN L, KUMC 39TH & RAINBOW, 66103
588-6800 1902620512
36 M 1902 63 OR

MATHEWSON MO,HUGH S, KUMC 39TH & RAINBOW, 66103
588-3341 1902440964
21 M 1902 44 AN

MATTIOLI MO,LEONE, KUMC 39TH & RAINBOW, 66103
588-6311 56115560013
32 M 56115 69 PDC

MCCARTHY MO,ROBERT P, 8919 PARALLEL STE 231, 66112
334-9003 2834530719
25 M 2834 54 U

MCMILLAN MD,JOHN H, KUMC 39TH & RAINBOW, 66103
588-6800 1645790347
52 M 1645 80 OR

MEBUST MO,WINSTON K, KUMC 39TH & RAINBOW, 66103
588-6146 5404580398
33 M 5404 66 U

MILLER MO,OENNIS W, 600 NEBRASKA STE 102, 66101
621-4001 4707750583
49 M 4707 82 OBG

MILLIGAN MO,OONALO B, KUMC 39TH & RAINBOW, 66103
588-1937 2307740632
48 M 2307 75 FP

MOELLER MO,OONALO O, 155 S 18TH, 66102
371-4301 1902600546
34 M 1902 61 GE

MOLOS MO,MARK A, 8919 PARALLEL STE 206, 66112
788-7099 2846810415
57 M 2846 88 IM

MOORE MO,WAYNE V, KUMC 39TH & RAINBOW, 66103
588-6326 2604701786
42 M 2604 74 PO

MORAN MO,JON FREDERICK, KUMC 39TH & RAINBOW, 66103
588-2840 2802730601
46 M 2802 85 TS

MORFFI MO,RAUL R, 8919 PARALLEL STE 206, 66112
788-7099 27501510799
25 M 27501 67 IM

MURRAY MO,JANE L, 39TH & RAINBOW, 66103
588-1900 514771014
51 F 514 86 FP

NAMNUM MO,PETER A, 8919 PARALLEL, 66112
780-7099
56 M 801 87 PUO

NEFF MO,JAMES R, KU MEO CENTER, 66103
588-6198 1902660743
40 M 1902 67 ORS

NELSON MO,JOHN 8, 8919 PARALLEL STE 416, 66112
299-8000 2846750188
48 M 2846 78 PM

NIBBELINK MO,LARRY WAYNE, 8919 PARALLEL STE 440, 66112
299-2229 2846750196
48 M 2803 79 OBG

NOSLE MO,MARK J, KUMC 39TH & RAINBOW, 66103
588-6148 2501751459
49 M 2501 81 U

NORRIS MO,CHARLEY W, KUMC 39TH & RAINBOW, 66103
588-6700 1902640688
33 M 1902 65 OTO

O'BOYNICK II MO,PAUL LEONARD, KUMC 39TH & RAINBOW, 66103
588-6118 1902730822
48 M 1902 79 NS

O'DELL MO,MICHAEL L, KUMC 39TH & RAINBOW, 66103
588-1908 1902771090
51 M 1902 83 FP

OLSON MO, NANCY Y, KUMC PEO OEPT 39TH & RAINBOW, 66103
588-6325 2846820801
58 F 2846 A

PAROO MO,LILLIAN G, KUMC 39TH & RAINBOW, 66103
588-6371 74802620903
39 F 74802 79 PON

PAROO MO,MANUEL P, KUMC 39TH & RAINBOW, 66103
588-6464 74801623291
35 M 74801 73 P

PARAKH MO,AJITKUMAR M, 6013 LEAVENWORTH RO, 66104
299-2069 49501710091
47 M 49501 77 PUO

PARAKH MO,MAOHAVI A, 6013 LEAVENWORTH RO, 66104
299-2069 49501710341
47 F 49501 85 FP

PARRA MO,DANIEL C, 6013 LEAVENWORTH RO, 66104
299-2069 84703750108
43 M 84703 83 FP

PARRA MO,MIGUEL O, 6013 LEAVENWORTH RO, 66104
299-2069 84710640245
37 M 84710 70 FP

PERNOLL MO,MARTIN L, 39TH & RAINBOW, 66103
588-5287
39 M 4802 89 OBG

PERRY JR MO,LAWRENCE L, KUMC 39TH & RAINBOW, 66103
588-1908 1902590699
34 M 1902 73 FP

PIERCE MD,GEORGE E, KUMC 39TH & RAINBOW, 66103
588-6128 2307600466
33 M 2307 72 TS

POTTER MO,ROBERT L, 1969 N 33RD, 66104
321-0341 1902640726
38 M 1902 64 IM

POWERS MO,G ROBERT, 8919 PARALLEL PKWY, 66112
299-8000 1902650705
33 M 1902 67 FP

PREMSINGH MO,NALINI G, 4631 ORVILLE STE 202, 66102
596-2000 49527670020
39 F 49508 76 CO

PRESTON MO,OAVIO F, KUMC 39TH & RAINBOW, 66103
588-6810 3841590588
33 M 3841 74 NM

PRETZ MD,JAMES B, 1610 WASHINGTON BLVD, 66102
342-2442 1902470481
24 M 1902 47 FP

PRICE MD,JAMES GOROON, KUMC 39TH & RAINBOW, 66103
588-1900 702510481
26 M 702 78 FP

PRIETO MO, JORGE N, 6013 LEAVENWORTH RD, 66104 299-2069 26401690068 45 M 26401 76 GS	SCHUEGLER MD, RAYMOND A, 8919 PARALLEL PKWY STE 416, 66112 299-8000 190230747 37 M 1902 64 CO
PROSSER MO, ROBERT L, 39TH & RAINBOW, 66103 588-6504 519740371 48 M 519 88 EM	SCHWORM MO, CURTIS P, 155 SOUTH 18TH, 66102 371-4343 3005730863 47 M 3005 77 OR
PUGH MO, OAVIO M, KUMC 39TH & RAINBOW, 66103 588-6015 801580530 29 M 801 64 CO	SEGUIN MO, JOHN H, KUMC 39TH & RAINBOW, 66103 588-6337 54 M 3841 NPM
QUINN MO, CHARLES E, 4601 ORVILLE STE 15, 66102 287-6604 4707680500 43 M 4707 75 08G	SHAW MO, PAMELA K, UKMC PEO DEPT 39TH & RAINBOW, 66103 588-5000 1902861544 60 F 1902 89 PO
RALSTIN MO, JAMES H, 6013 LEAVENWORTH RD, 66104 299-2069 1902742341 49 M 1902 78 IM	SHIREMAN MO, PETER K, 8929 PARALLEL PKWY, 66112 596-4722 58 M 1902 87 PATH
RECKLING MO, FREDERICK W, KUMC 39TH & RAINBOW, 66103 588-6129 3545590475 34 M 3545 66 ORS	SILLS MO, THOMAS O, 51 N 12TH, 66102 281-8400 5606771241 49 M 5606 77 EM
REOFORO MO, JOHN W 8, KUMC 39TH & RAINBOW, 66103 588-6795 6501530164 28 M 6501 74 PM	SIMON MO, JOYCE L, 3930 CAMBRIIDGE, 66103 588-1908 55 F 1902 80 FP
REOMON MO, MARY L, KUMC 39TH & RAINBOW, 66103 588-1908 2878830370 44 F 2878 FP	SNYDER MD, THOMAS E, UKMC 39TH & RAINBOW, 66103 588-6243 1902731098 47 M 1902 82 08G
REEB MO, RONALD JOSEPH, 155 S 18TH, 66102 371-4343 3006720870 46 M 3006 79 OR	SOUCEK MO, CHARLES O, 155 S 18TH, 66102 371-4343 3005560682 31 M 3005 64 R
RHOODES MO, JAMES 8, KUMC 39TH & RAINBOW, 66103 588-6019 1902580766 28 M 1902 66 GE	SPEER MO, LELAND, 910 N WASHINGTON, 66102 1902360511 12 M 1902 36 00
RICE JR MO, FREDERICK A, 1029 N 32ND ST, 66102 281-5252 4802630641 36 M 4802 68 ORS	STECHSCHULTE MO, DANIEL J, KUMC 39TH & RAINBOW, 66103 588-6008 2834620921 36 M 2834 73 A
RICHARDSON MO, GEORGE A, KUMC 39TH & RAINBOW, 66103 588-6134 49 M 4814 87 ORS	STEELE MO, CLARENCE H, 155 S 18TH STE 160, 66102 321-1161 1902400474 14 M 1902 40 0T0
RILEY MO, RAY 8, 2020 ORVILLE, 66102 1902360448 06 M 1902 36 00	STEER MO, PHYLLIS L, 39TH & RAINBOW, 66103 588-6670 1902851778 57 F 1902 89 AN
RISING MO, JESSE O, KUMC 39TH & RAINBOW, 66103 588-1934 1902380481 14 M 1902 38 IM	STEHR MO, CHRISTIAN H, 51 N 12TH, 66102 281-7774 1643670786 41 M 1606 AN
ROBINSON MO, RALPH G, KUMC 39TH & RAINBOW, 66103 588-6810 1902620768 37 M 1902 63 NM	STRICKLAND MO, JULIE L, KUMC 39TH & RAINBOW, 66103 588-6230 58 F 2803 08G
ROOK MO, LEE E, 1111 S 55TH, 66106 1902380490 09 M 1902 38 00	STUBBLEFIELD MO, CHARLES T, 8919 PARALLEL STE 440, 66112 299-2229 1902580936 32 M 1902 59 08G
ROSENBERG MO, ALLAN J, KUMC 39TH & RAINBOW, 66103 588-6354 2407620812 38 M 2407 PO	STUBBLEFIELD MO, JENNIFER L, 8919 PARALLEL STE 440, 66112 299-2229 1902851719 59 F 1902 86 08G
ROSENTHAL MO, STANTON J, KUMC 39TH & RAINBOW, 66103 588-6800 1902710953 46 M 1902 72 OR	TEMPLETON MO, ARCH W, KUMC 39TH & RAINBOW, 66103 588-6805 3005570661 32 M 3005 69 R
ROTH MO, ALAN E, BETHANY HOSP 51 N 12, 66102 281-8867 1902620776 35 M 1902 63 PATH	THEROU MO, LEONA F, KUMC 39TH & RAINBOW, 66103 588-5908 6701670190 41 F 6701 71 PO
RUBLE MO, REBECCA A, KUMC 39TH & RAINBOW, 66103 588-1908 56 F 1902 90 FP	THOMAS MO, JAMES H, KUMC 39TH & RAINBOW, 66103 588-6115 2012660629 41 M 2012 75 GS
RUTH MD, WILLIAM E, 39TH & RAINBOW, 66103 588-6044 1902530793 26 M 1102 53 PH	THOMAS MO, THOMAS V, 155 S 18TH ST STE 214, 66102 371-7676 49549610021 37 M 49549 72 GS
SANDERS MD, JAMES E, KUMC 39TH & RAINBOW, 66103 588-1908 51 M 1902 90 FP	THOMPSON MO, DANNIE M, TWO GATEWAY CTR STE 917, 66101 321-3355 4707640583 35 M 4707 68 08G
SANTOS MO, FERMIN M, 6013 LEAVENWORTH RD, 66104 299-0538 84706760686 49 M 84706 82 P	TICKLES MO, OEBRA F, 8919 PARALLEL STE 326, 66112 299-8300 56 F 1902 89 PO
SCHLOERB MO, PAUL R, 39TH & RAINBOW, 66103 3545440465 19 M 3545 55 GS	TIOJANCO MD, REYNALDO R, 6013 LEAVENWORTH RD, 66104 299-2069 74801652437 44 M 74801 65 FP

TORLINE MD, RONALD L, KUMC 39TH & RAINBOW, 66103
588-6670 1902841837
58 M 1902 85 AN

TRUEWORTHY MD, ROBERT C, KUMC 39TH & RAINBOW, 66103
588-6340 2802660742
40 M 2802 73 PD

TUCKER MD, VIRGINIA L, 39TH & RAINBOW PED OEP, 66103
588-5919 1902570965
30 F 1902 57 PD

UNRUH MD, GREGORY K, KUMC 39TH & RAINBOW, 66103
588-6670 1902810923
55 M 1902 82 AN

UNTERMAN MD, STEVEN R, 39TH & RAINBOW, 66103
588-6600
56 M 3901 84 OPH

VARGHESE MD, GEORGE, KUMC 39TH & RAINBOW, 66103
588-6944 49552700197
44 M 49509 77 PM

VAT5 MD, TRIBHAWAN S, KUMC 39TH & RAINBOW, 66103
588-6340 49529630033
40 M 49529 75 PD

WARNOCK MD, JULIA K, 39TH & RAINBOW, 66103
588-1330 4706841925
51 F 4706 88 P

WEED MD, JOHN C, 39TH & RAINBOW, 66103
588-6244 2101681231
43 M 2101 86 GYN

WEIGEL MD, JOHN W, KUMC 39TH & RAINBOW, 66103
588-6147 1902540977
29 M 1902 54 U

WIBLE MD, KENNETH L, KUMC 39TH & RAINBOW, 66103
588-5908 4102691691
43 M 4102 87 PD

WILSON MD, DAVID B, KUMC 39TH & RAINBOW, 66103
588-6015 4706801001
54 M 4706 81 IM

WISE MD, JOSEPH E, 8919 PARALLEL 5TH 326, 66112
299-8300
51 M 1902 PD

WOLF MD, KARL T, 621 NDRTHRUP, 66101
588-6015 1902480541
14 M 1902 48 00

ZINN MD, THOMAS W, 155 S 18TH, 66102
371-4343 1902671001
41 M 1902 68 R

KANSAS CITY MO — 816

AHMED MD, IFTEKHAR, 2900 BALTIMORE #39D, 6410B
756-2651 89519740019
45 M N

BARELLI MD, PAT A, 2929 BALTIMORE, 6410B
1902440077
19 M 1902 44 ENT

BRIDGENS MD, JAMES G, 1025 HUNTINGTON RD, 64113
363-1123 1902470090
22 M 1902 47 PATH

CHRISTENSEN MD, SHANE R, 4822 RIDGEWAY CT, 64133
281-8881 2846790074
55 M 1902 83 EM

CULLAN MD, SAMUEL K, 120 W 12TH ST STE 17DD, 64105
421-3355
54 M 3006

OAVIS MD, RICHARD E, 106 W 11TH #1129, 64105
1902540209
26 M 1902 54 00

DEVINS MD, GEORGE S, 670D TRDDST #52D, 64131
36 M 1902 62 IM

GOOFREY MD, WILLIAM A, 432D WDRNALL, 64111
561-2289 1902650284
38 M 1902 66 DPH

GRAHAM MD, JAMES R, 888D WARD PKWY, 64114
333-9700 1902701342
43 M 1902 FP

HARD MD, BENJAMIN F, 8400 HAWTHORN RD, 64120
242-2525 4802550664
28 M 4802 64 OM

HOPKINS MD, JAMES P, 6650 TROOST, 64131
523-7811
22 M 2407 85

HUNKELER MD, JOHN O, 290D BALTIMORE 5TH 65D, 64108
41 M 1902 85 OPH

KINDRED MD, LYNN H, 432D WDRNALL RD 5TH 40-II, 64111
531-5510
37 M 1902 CD

KINPORT5 SR MD, EDWARD B, PO BOX 1823, 64141
1602420309
15 M 1602 77 00

KLEMM MD, J MARTIN, 432D WDRNALL RD #702, 64111
661-9669 1902780943
53 M 1902 80 P

LUETJE MD, CHARLES MARION, 3100 BROADWAY 5TH 509, 64111
531-7373
41 M 2803 78 DTO

MATHEWS MD, DAVID R, HBC #3 PO BOX 9627, 64134
966-5011 1902781150
53 M 1902 80 FP

PAYNE MD, J RALPH, 4460 ROCKHILL TERR, 64110
561-2930 1902660808
40 M 1902 67 EM

POONAWALA MD, HUSENI, 11201 COLORADO, 64137
763-5200
33 M 49528 71 P

RYSER MD, CAROL A, 5306 E 115TH 8LDG 2, 64137
37 F 1902 63

SCHLIDZMAN MD, DANIEL L, 6420 PROSPECT 5TH T303, 64132
333-1919
38 M 1902 PM

SUTTON MD, ROBERT E, 100 W 31ST, 64108
931-1290
46 M 1902 73 FP

THALBLUM MD, HARVEY, 6400 PROSPECT 5TH 310, 64132
523-2400
39 M 1103 R

UTLEY MD, JAMES HARMON, 4951 WESTWOOD TERR, 64112
281-8881 1606741941
51 M 1606 77 EM

WISE MD, MORRIS F, 6724 TROOST, 64131
333-7885
39 M 72

YOST JR MD, JOHN G, 6420 PROSPECT 5TH T207, 64132
444-9000
53 M 3005 OR5

ZARR MD, JAMES S, 6675 HOLMES ST #410, 64131
276-7035 2803811108
55 M 2803 86 PM

KINGMAN — 316 (Wyandotte Medical Society)

BURKET JR MD, GEORGE E, 5 SPRING LAKE RT 1, 67068
1902370125
12 M 1902 37 DO

KINSLEY — 316 (Iroquois County Medical Society)

ATWDDD MD, M DALE, 409 ELIZABETH AVE, 67547
1902510032
19 M 1902 51 OD

POEHLMANN MO,KURT S, PO 80X 205, 67547

659-3614
37 M 4812 89 FP

SCHNOEBELEN MO,RENE E, 416 E 4TH, 67547

659-2141 3901400384
16 M 3901 46 FP

KIOWA — 316 (Ninnescah Medical Society)

CHRISTENSEN MO,MARION O, 220 S 8TH, 67070

825-4121 3901520100
25 M 3901 53 FP

LA CROSSE — 913 (Central Kansas Medical Society)

BHARGAVA MD,ASHOK KUMAR, PO 80X 490, 67548

222-2564 49547640119
37 M 49547 78 FP

BHARGAVA MO,SHOBHANA, PO 80X 490, 67548

222-2564 49547640135
38 F 49547 81 FP

LARNED — 316 (Barton County Medical Society)

CRAM JR MO,OLE R, 521 CARROLL, 67550

1902430233
18 M 1902 43 00

DOUGHERTY JR MO,THOMAS M, 916 W 2ND, 67550

285-6993
56 M 1902 89 FP

JONES MO,OAVIO B, 804 CARROLL, 67550

285-3133 1902840962
58 M 1902 87 GP

SHAH MD,MIAN, SHAH CLINIC PO 80X 30, 67550

285-3173 16002580032
32 M 70403 76 GS

SHAH MO,NASREEN, SHAH CLINIC PO 80X 30, 67550

285-3173 70409620068
39 F 70409 76 08G

SMITH MO,JOHN O, PO 80X 269, 67550

3901510554
22 M 3901 52 00

LAWRENCE — 913 (Douglas County Medical Society)

BAILEY MO,WILLIAM A, PO 80X 127, 66044

843-9125 1902660051
40 M 1902 67 ORS

BEACH MD,RICHARD R, 324 WOODLAWN DR, 66044

2802480043
23 M 2802 54 00

BELOT JR MO,MONTI L, LAWRENCE NATIONAL BK BLDG, 66044

843-3640 1902400032
13 M 1902 40 FP

BISHOP MD,RODNEY LEE, 3310 CLINTON PKY CT, 66044

842-7200 1902751625
49 M 1902 75 IM

BOYDEN MO,MARY S, 4004 TRAIL RD, 66049

842-3778 2604390144
14 F 2604 42 POA

BRANSON MD,VERNON L, 346 MAINE, 66044

842-4477 1902420076
17 M 1902 42 PO

BRUNFELT MO,JOAN KRAUS, 404 MAINE, 66044

842-3635 1902770204
52 F 1902 78 IM

BUCK JR MO,HENRY W, WATKINS MEM HSOP, 66045

864-9500 1902600121
34 M 1902 61 08G

CHEDIAK MO,ELIAS, 601 MISSOURI, 66044

841-7430 84704650344
39 M 84704 71 P

CULVER MO,WARREN T, 3506 W TENTH, 66044

3508460251
20 M 3508 67 00

OENNING MO,OALE P, 346 MAINE, 66044

842-6644
56 M 1902 GS

OUNLAP MO,RICHARD L, 711 SUNSET DR, 66044

842-4344 3005370247
12 M 3005 38 EENT

FLOERSCH MO,HUBERT M, 1915 QUAIL RUN, 66046

1902350124
08 M 1902 35 00

FRIESEN MO,OALE, PO 80X 521, 66044

842-7026 1902740305
47 M 1902 75 AN

FULBRIGHT MO,THOMAS W, 1112 W 6TH STE 210, 66044

865-5995
56 M 1902 90 FP

GILLES MO,HELEN M, 1301 IOWA, 66044

1902450277
22 F 1902 45 00

GOOWIN MO,PHILLIP A, 500 ROCKLEGE, 66044

841-6540 1902550425
28 M 1902 55 AN

GRAY MD,SCOTT E, 346 MAINE, 66044

841-0326 1902790761
50 M 1902 83 08G

HAGGAN MO,MARGARET E, 1746 N H, 66044

2501420355
00 F 2501 69 00

HASSELLE III MO,JAMES E, 346 MAINE, 66044

841-1243 4706590621
35 M 4706 69 P

HATTON MO,ONALD W, 404 MAINE STE 3, 66044

842-3635 1902680353
42 M 1902 69 IM

HIEBERT MO,OAVIO L, 1112 W SIXTH, 66044

841-3211 1902610371
36 M 1902 62 R

HIEBERT MD,JOHN B, 404 MAINE, 66044

841-3636 1902680370
40 M 1902 72 CO

HOFFMAN MD,J PHILIP, 404 MAINE, 66044

842-3635 1902780811
00 M 1902 IM

HOFFMANN MO,MARY A, 543 LAWRENCE AVE STE 0, 66049

799-2994
54 F 2846 80 ORS

INGHAM JR MD,H LAIRO, 404 MAINE STE 3, 66044

842-3635 3901700540
45 M 3901 73 IM

JONES MD,H PENFIELD, MED ARTS CTR 346 MAINE, 66044

2401310650
06 M 2401 33 GS

JOSEPH MO,HOWARD F, 308 MAINE, 66044

843-3981 1902510377
26 M 1902 51 U

KENNEDY MO,L ELAINE, 404 MAINE, 66044

842-3635 1902820929
00 F IM

LEARNEO MO,GEORGE R, 401 ARKANSAS, 66044

843-5502 1902550701
22 M 1902 56 GS

LOVELANO MO,G CHARLES, 346 MAINE, 66044
842-4477 1902730695
47 M 1902 74 PO

MAOSEN MO,GLENN L, 1112 W SIXTH, 66044
841-3211 3005650479
38 M 3005 68 R

MAGEE MO,LAWRENCE M, RR #1 BOX 178AC, 66044
864-9500
52 M 1902 79 FP

MANAHAN MO,G EUGENE, 2129 TERRACE RD, 66044
1902440913
19 M 1902 44 00

MCGINNESS MO,MARILEE K, 1112 W 6TH STE 204, 66044
843-2010 3905820116
54 F 3905 88 GS

MITCHELL MO,ALEX C, 1626 W 20TH, 66044
843-4739 1902500452
18 M 1902 50 PH

MOORELL MO,CAROL A, 404 MAINE, 66044
749-6100 1902710023
45 F 1902 72 PATH

MYRICK MO,STEPHEN W, 346 MAINE, 66044
842-6644 1902771049
52 M 1902 78 GS

NELSON MO,RICHARD O, 2425 ORCHARO LANE, 66044
1001410403
11 M 1001 41 00

O'NEAL MO,LYNN W, 1112 W 6TH #202, 66044
841-2280 1902771111
51 M 1902 86 OPH

OELSCHLAGER MO,RONALD O, 1112 W SIXTH, 66044
841-3211 1902690812
43 M 1902 70 R

ORCHARO MO,RICHARD A, 1112 W 6TH STE 202, 66044
841-2280 2802680549
41 M 2802 74 OPH

OSBERN MO,LIOA, 404 MAINE, 66044
842-3635 1902771120
52 F 1902 77 IM

PHIPPS MO,CARLA B, 500 ROCKLEOGE RO, 66044
841-6540
55 F 1902 FP

PLACEK MO,DEBRA C, 346 MAINE, 66044
843-0677 3005781000
54 F 3005 OBG

PRAEGER MO,MARK A, 1112 W 6TH STE 204, 66044
843-2010 1902680817
42 M 1902 69 GS

REEO MO,JAMES S, WATKINS MEMORIAL HOSP, 66045
843-4455 1902470499
23 M 1902 47 FP

REEO MO,RALPH R, 1501 WAKARUSA OR, 66047
749-0034 1902530718
27 M 1902 53 IM

REESE MO,JOHN L, 2417 PRINCETON BLVD, 66044
1902610657
35 M 1902 62 00

RIOROAN MO,TERRANCE, 346 MAINE, 66044
842-4477 1902771260
51 M 1902 83 AOL

ROBERTS MO,RICHARD S, 342 WOODLAWN OR, 66044
2802440785
19 M 2802 46 00

RUNOQUIST MO,BETH, 346 MAINE, 66044
842-4477 1902851549
58 F 1902 PO

SANDERS MO,J ALAN, LAWRENCE CL LAB 404 MAINE, 66044
842-2083 1902600716
29 M 1902 62 PATH

SCHROEDER MO,SYONEY O, 902 W 25TH, 66044
1902441324
18 M 1902 44 00

SCHWEGLER MO,RAYMOND A, 1504 UNIVERSITY OR, 66044
2604310884
07 M 2604 35 00

SEGE8RECHT MO,STEPHEN L, 1112 WEST 6TH, SUITE 216, 66044
841-5217 1902800936
55 M 1902 OTO

SHUTT MO,CHARLES B, 346 MAINE, 66044
843-0677 1902821739
56 M 1902 83 08G

STEIN MO,MATTHEW, 3310 CLINTON PK CT, 66047
842-7200
49 M 2803 ON

TILSON MO,WAYNE R, 325 MAINE, 66044
749-6100 5404771380
49 M 5404 78 EM

VERNON MO,MARY C, 500 ROCKLEOGE, 66044
841-6540 1902771529
52 F 1902 78 FP

WELL MO,MICHAEL A, 1112 W 6TH, 66044
749-0639
41 M 1606 74 U

WERTZBERGER MO,JOHN, 1112 W 6TH PO BOX 127, 66044
843-9125 1902630909
36 M 1902 64 ORS

WOLLMANN MO,MARTIN, 2615 ORCHARO LN, 66044
1902571058
26 M 1902 70 00

LEAVENWORTH — 913

(Leavenworth County Medical Society)

COMBS MO,PETER S, 419 ARCH ST, 66048
682-0242 4101410132
14 M 4101 46 IM

OIALLO MO,GASTON I, 113 OELAWARE STE E, 66048
682-9030 86905630182
35 M 86905 75 GE

OUIYSAK MO,SAMI, 920 6TH AVE, 66048
682-2424 90201470471
22 M 90201 IM

FLANNER MO,FRANK R, 922 FIFTH AVE, 66048
651-8179 1902790663
43 M 1902 83 FP

GRAHAM MO,KENNETH L, RTE 2 BOX 182AA, 66048
3840450243
21 M 3840 48 00

GRISOLIA MO,ANORES, 210 ELM, 66048
84708500011
27 M 84708 63 00

HALLER MO,CHRIS C, 4101 S 4TH ST TRFWY, 66048
682-2000 1902800448
55 M 1902 81 GS

HAMMEKE MO,JOHN C, 3601 S 4TH ST TRAFFICWAY, 66048
682-5201 401610308
27 M 401 66 OPH

JOHNSON MO,PAUL D, 221 OELAWARE #A, 66048
682-2240 1902610401
36 M 1902 64 FP

MCCOLLUM MO,WILLIAM B, 920 6TH, 66048
682-1466 1902660671
41 M 1902 68 TS

MENGEL MO,CHARLES E, BOX 1792, 66048
682-2000 2307570362
31 M 2307 88 IM

MERRITT MO,W HENRY, 1808 WESTWOOD OR, 66048
702390265
14 M 702 58 00

MILLS MO,VERNON A, 4514 S 4TH ST TRFWY, 66048
727-6046 1902770981
51 M 1902 80 PO

PALMER MO,MARVIN M, 4516 S 4TH TRAFWY #A, 66048
727-1151 702710634
45 M 702 77 OBG

RABE MO,MELVIN A, 600 S BROADWAY, 66048
1902370478
14 M 1902 37 00

SNOW MO,OONALO L, 1127 VILAS, 66048
64904540020
21 M 64901 62 00

STEVENS MO,LEAH J, 920 6TH AVE, 66048
682-2424 1902810214
55 F 1902 FP

STRUTZ MO,WILLIAM C, 1918 WESTWOOD OR, 66048
682-8868 5606431246
08 M 5606 59 R

VOORHEES MO,CARROLL O, 2510 GIRARD, 66048
1902520739
25 M 1902 52 00

VOORHEES MO,GOROON S, 1914 WESTWOOD OR, 66048
642-6661 1902390606
12 M 1902 39 IM

LEBO — 316 (Flint Hills County Medical Society)

HUTCHISON MO,JOE R, BOX 303, 66856
256-6346 1902830916
55 M 1902 86 FP

LENORA — 913 (Northwest Kansas Medical Society)

STEICHEN MO,EDWARD F, BOX 97, 67645
1601310941
05 M 1601 31 00

LEOTI — 316 (Seward County Medical Society)

JUBAY JR MD,FELIPE L, 411 S FOURTH, 67861
375-2222
49 M 74811 81 GP

LIBERAL — 316 (Seward County Medical Society)

ALLEN MO,RAY E, 2 PLAZA DR, 67901
624-5691 1902630020
37 M 1902 64 IM

BRAOLEY MD,FENWICK P, 718 W 15TH, 67901
624-6151 1001630039
29 M 1002 PATH

BRYAN MD,PHILIP C, 1410 N WESTERN, 67901
624-0255 3901691079
41 M 3901 GS

CAE00 MO,CARMELITA O, 2401 LILAC OR, 67901
624-1651 74801634196
41 F 74801 77 R

ESTRADA MO,EDMUNDO C, 102 E 11TH, 67901
624-2565 74801671938
43 M 74801 80 GS

ESTRADA MO,LINA, 102 E 11TH, 67901
624-2565 74801681381
43 F 74801 80 PO

GRIMES MO,I ROSS, PO BOX 2856, 67905
624-1676 3901540283
27 M 3901 61 TS

HOLCOMB MO,WILLIAM M, 15 E 11TH, 67901
624-2252 3901560292
31 M 3901 63 GS

KNUDSEN MO, OENNIS, BOX 2529, 67905
624-3811 1803760850
00 M OBG

KOONS MO,JESS W, PO BOX 2886, 67901
624-3841 1902570469
27 M 1902 57 OPH

NEVINS MO,RICHARD L, 1410 WESTERN AVE, 67901
624-0255 3901730902
47 M 3901 75 FP

PALMER MO,H C, PO BOX 2347, 67901
624-5691
36 M 1902 64 IM

PATRON MO,RICARDO A, 222 W 15TH ST PO BOX 2529, 67901
624-3811 74808570207
31 M 74808 83 OBG

PETERSON MD, HUBERT C, PO BOX 1340, 67901
624-1651
43 M 0401 PATH

REESE MO,JACK O, 15 E 11TH, 67901
624-6226 1902570698
32 M 1902 57 FP

WADE MO,THEODORE E, 318 N LINCOLN, 67901
512300472
04 M 512 57 00

ZAINALI MO,ASSAOOLLAH, PO BOX 1891, 67901
624-1651 51701720249
46 M 51701 79 R

LINCOLN — 913 (Central Kansas Medical Society)

MEDUNA MO,LEO L, PO BOX 467, 67455
524-4476
56 M 3005 FP

LINDSBORG — 913 (McPherson County Medical Society)

FREDRICKSON MD,OUANE E, 121 W LINCOLN, 67456
227-3371 1902660310
39 M 1902 67 FP

MURFITT MO,MALCOLM C, 125 W STATE, 67456
801410375
13 M 801 46 00

LYNDON — 913 (Shawnee County Medical Society)

MARCELL MO,GERALD W, 710 TOPEKA, 66451
828-3143
46 M 1902 89 FP

STOUT MO,NILES M, , 66451
828-4521 1902500711
16 M 1902 50 FP

LYONS — 316 (Rice County Medical Society)

GRIMES MD,JAMES T, 1221 W NOBLE, 67554
257-5124 1902530319
27 M 1902 53 FP

SIEMENS MD,RICHARD A, 1221 W NO8LE, 67554
257-5124 1902590826
30 M 1902 60 FP

STRINGFIELD MD,SCOTT L, 1221 W ND8LE, 67554
257-5124 1902841756
57 M 1902 88 FP

TD8IAS MD,RDGER R, 1221 W ND8LE, 67554
257-5182 1902761400
51 M 1902 82 FP

MANHATTAN — 913 (Riley County Medical Society)

BAKER MD,RICHARD B, 2600 ANDERSON, 66502
537-4200 4113680062
42 M 4113 76 ORS

BAMBARA MD,JDHN F, 1133 CDLLEGE, 66502
539-5363 1902751561
46 M 1902 88 PATH

BARLOW MD,JDHN M, 1133 COLLEGE, 66502
539-3504 1102710050
45 M 1102 81 OTD

BASCOM MD,GEDRGE S, 1133 CDLLEGE, 66502
539-5341 2401520077
27 M 2401 59 GS

BOESE MD,KENNETH M, 1133 COLLEGE, 66502
776-4744 1902560145
25 M 1902 56 FP

BOXER MD,GARY, 205 S SETH CHILOS RD STE 4, 66502
537-3945
00 M P

CRANE MD,CHARLES H, 720 CANFIELDO DR, 66502
3520460151
22 M 3520 62 00

DURKEE MD,WILLIAM R, 1133 CDLLEGE AVE, 66502
776-4744 1902450234
23 M 1902 45 IM

FISCHER MD,REX R, 1133 COLLEGE, 66502
776-1400 3005600251
34 M 3005 68 08G

FREEMAN MD,FRED A, 1133 CDLLEGE, 66502
537-8710 1902690383
42 M 1902 70 U

GARDNER MD,JAMES D, 1133 COLLEGE, 66502
537-4940 2834710318
43 M 2834 76 IM

HANCDCK MD,0ANIEL E, 1133 COLLEGE PD 80X 128, 66502
539-5363 2803710239
45 M 2803 78 PATH

HAUN MD,RUOY T, 1133 COLLEGE BLDG D, 66502
537-8611 1902780781
49 M 1902 82 D8G

HEASTY MD,RD8ERT G, 2030 SCHEU DR, 66502
3519380411
11 M 3519 46 DD

HENNING JR MD,HARDLD J, 1133 CDLLEGE, 66502
537-1414 1902820732
55 M 1902 08G

HINKIN MD,DOUGLAS P, 2900 AMHERST, 66502
776-9761 1902780803
53 M 1902 84 FP

JONES MD,WILLIAM T, 2600 ANDERSON, 66502
537-4200 1902752257
50 M 1902 85 ORS

JUBELT MD,HIL8ERT P, 2010 MEADOWLARK RD, 66502
1611431313
19 M 1611 49 00

KIRK MD,THOMAS E, 1133 CDLLEGE, 66502
776-3451 3005710463
44 M 3005 76 DPH

KLINGLER JR MD,EUGENE A, 1133 CDLLEGE AVE, 66502
539-5341 1902620466
35 M 1902 63 GS

KLO8ASA MD,CHARLES L, 200 SOUTHWIND PL #202, 66502
539-5337 2803750494
49 M 2803 8D CHP

LAFENE MD,BENJAMIN W, 1844 ANDERSON, 66502
3806310238
01 M 3806 33 00

LOWE MD,STANLEY W, 1133 CDLLEGE, 66502
776-3451 1902590516
32 M 1902 63 DPH

LYONS JR MD,FRANK C, 1133 COLLEGE, 66502
539-7641 3840700916
44 M 3840 74 DR

MCNEIL MD,EL8ERT D, 2020 HUNTING AVE, 66502
702480337
22 M 702 49 00

MOWRY MD,GERALD L, 1441 ANDERSON, 66502
776-4200 1902530599
26 M 1902 53 08G

OLNEY MD,RO8ERT D, 1133 CDLLEGE, 66502
539-7555 3005510553
27 M 3005 59 GS

PETERSON D D, PEGGY S, 1133 COLLEGE 8DX 128, 66502
539-5363
52 F 2878 8D PATH

PETERSON JR MD,JACK T, 3100 HARAHEY RIDGE, 66502
539-3504
00 M EENT

PETERSON MD,JACK T, 1133 COLLEGE PO 8DX 128, 66502
539-5363 1902500525
25 M 1902 50 PATH

PHILIPP MD,JDSEPH THEODDRE, 1133 COLLEGE 8LDG 0, 66502
537-7373 1902710881
45 M 1902 72 OPH

SHEFFIELD MD,MICHAEL A, 1133 CDLLEGE, 66502
539-7641 1902821721
55 M 1902 86 DR

SHIELDS MD,THOMAS M, 1133 CDLLEGE AVE, 66502
539-5341 1902742537
49 M 1902 77 GPVS

STDNE MD,G REX, 360 WILDCAT CREEK RD, 66502
1902540926
29 M 1902 54 00

TAYLOR MD,8AR8ARA D, 1133 CDLLEGE, 66502
357-4940 1902751901
50 F 1902 79 IM

VOLKMANN II MD,HARLEY W, 1133 COLLEGE, 66502
539-7641 1902721173
47 M 1902 73 R

WIGGLESWORTH MD,ANNE, 1133 CDLLEGE AVE 8LDG A, 66502
539-4738 1902753016
40 F 1902 79 08G

MANKATO — 913 (Republic County Medical Society)

KIMBALL MD,RICHARD R, 102 S CENTER, 66956
378-3511 1001720585
45 M 1001 73 FP

MARION — 316 (Marion County Medical Society)

HODSON MD,DDN W, 537 S FREEBDN, 66861
382-3722 1902790914
53 M 1902 FP

VU MO, KHANH T, 537 S FREEBORN, 66861
382-3722
61 M 1902 FP

MARYSVILLE — 913
(Northeast Kansas Medical Society)

ARGO MO, DONALD, 808 N 19TH, 66508
562-2303
36 M 3005 65 FP

LAWS MO, LEWIS R, 808 N 19TH, 66508
443-3121
25 M 1902 54 FP

RYAN MO, JOHN M, 1902 MAY, 66508
562-2303
47 M 1902 FP

MCLOUTH — 913
(Shawnee County Medical Society)

PALAGANAS-TOSCO MO, AMANOA C, 313 S UNION, 66054
796-6116 74801702132
45 F 74801 86 FP

SNOOK MO, ROBERT RUFUS, , 66054
1902420653
11 M 1902 42 00

MCPHERSON — 316
(McPherson County Medical Society)

BRANOSTEO MO, ERNEST C, 400 W 4TH, 67460
241-1654 1606440185
18 M 1606 47 08G

BULLER MO, DAVIO L, 400 W 4TH, 67460
241-7400 1902850232
58 M 1902 FP

CABRERA MO, ALBERT, 915 N WALNUT, 67460
241-4079 74801553021
30 M 74801 80 GS

CARLSSON MD, E R, 400 W 4TH, 67460
241-4272
00 M IM

CLAASSEN MD, SAMUEL D, 400 W FOURTH, 67460
241-7033 1902780323
53 M 1902 79 IM

COLLIER MO, WILLIAM J, 400 W 4TH, 67460
241-1766 3605480097
25 M 3605 59 GS

FERREE MO, RICHARD ALLAN, 400 W FOURTH, 67460
241-7400 3006760189
51 M 3006 78 FP

FIELOS MD, GALEN W, 333 C - S LAKESIDE DR, 67460
1902490228
15 M 1902 49 00

JOHNSON MD, J RICHARD, 400 W 4TH, 67460
241-4293 1902550603
28 M 1902 55 IM

PIERSON MO, WEIR, 1000 HOSPITAL DR, 67460
241-1445 1902441197
17 M 1902 44 FP

PRICE MD, VAUGHAN C, PO BOX 451, 67460
4706290376
05 M 4706 32 GS

THOMAS MD, GREGORY MCQUEEN, 400 W FOURTH, 67460
241-7400 1902731161
47 M 1902 79 FP

MEADE — 316
(Iroquois County Medical Society)

FELDMAYER MO, SEELEY T, PO BOX 1030, 67864
873-5432 74811800027
46 M 74811 81 GP

HILL MD, RICHARD H, BOX 709, 67864
1902440697
18 M 1902 44 00

MEDICINE LODGE — 316
(Ninnescah Medical Society)

MEADOR O O, RICHARD W, 710 N WALNUT, 67104
886-5949
00 M

STUCKY MO, DEAN E, 901 N WALNUT, 67104
886-5653 1902600848
33 M 1902 61 FP

MINNEAPOLIS — 913
(Saline County Medical Society)

BARKER MO, STEVEN E, 311 N MILL, 67467
392-2144 1902760098
51 M 1902 77 FP

WEDEL MO, KENNETH O, 311 N MILL, 67467
392-2144 1902600937
32 M 1902 61 FP

WEDEL MD, KERMIT G, 311 N MILL, 67467
392-2144 1902600945
32 M 1902 61 FP

MINNEOLA — 316
(Iroquois County Medical Society)

STEPHENS DO, G MARCUS, 222 MAIN, 67865
885-4202 2878840189
57 M 2878 85 FP

STEPHENS MO, CHARLES, BOX 97, 67865
885-4202 2803580319
33 M 2803 60 FP

MOUNDRIDGE — 316
(Harvey County Medical Society)

KAUFMAN MO, WILLARD E, PO BOX 640, 67107
345-6322 1902530459
28 M 1902 53 FP

LOGANBILL MD, VARDEN J, PO BOX 640, 67107
345-6322 1902540560
26 M 1902 54 FP

MULVANE — 316
(Sedgwick County Medical Society)

CARRO MD, ANTONIO L, 102 E MAIN, 67110
777-0101 1902850305
57 M 1902 87 FP

COBB MD, LESLIE H, RR 1 BOX 196, 67110
4804470129
17 M 4804 49 00

NEODESHA — 316 (Southeast Kansas Medical Society)

BARRETT MO, BRAOLEY H, PO BOX 315, 66757
325-3055 1902830177
57 M 1902 FP

CHRONISTER MO, BERT, PO BOX 118 806 MAIN, 66757
325-2622 1902640122
38 M 1902 65 FP

MOORHEAD JR MO, F ALLEN, 709 MAIN BOX 180, 66757
325-2200 1902650624
39 M 1902 66 FP

NESS CITY — 913 (Central Kansas Medical Society)

OOAK MD, BASCOM P, 412 N TOPEKA, 67560
798-2233 3901730350
36 M 3901 89 FP

IMSEIS MO, MIKHAIL Y, 722 E LOCUST, 67560
798-2203 91502750068
50 M 33004 GP

NEWTON — 316 (Harvey County Medical Society)

ALLEN MO, FRANCES A, 1112 BOYD, 67114
1902430012
15 F 1902 43 00

BATES MO, MICHAEL N, 215 S PINE STE 302, 67114
283-4153 1902751587
50 M 1902 77 OBG

BECK MO, WILLIAM R, 203 E BROADWAY, 67114
283-2800 1902830223
55 M 1902 87 OPH

BOGNER MD, PAUL F, 203 E BROADWAY, 67114
283-2800 1902770158
52 M 1902 80 GS

CARPER MD, IVAN H, 203 E BROADWAY, 67114
283-2800 1902590125
28 M 1902 60 GS

CARPER MO, OWEN E, #5 SYCAMORE CT, 67114
283-8522 1902640106
37 M 1902 65 FP

CLAASSEN MO, MILTON A, 201 S PINE ST, 67114
283-3600 1902580189
32 M 1902 59 ORS

CRAIG MO, CHARLES C, AXTELL CL 203 E BROADWAY, 67114
283-2800 1902710252
45 M 1902 72 ORS

DAVIS MD, KEVIN B, 203 E BROADWAY, 67114
283-2800
53 M 4812 OBG

OYCK MD, GEORGE, 1901 EAST FIRST ST, 67114
283-2400 6201640154
37 M 6201 73 P

ENNS MD, EUGENE K, 6 INDIAN LN, 67114
1902400199
15 M 1902 40 00

FENT MO, LEE S, MED ARTS BLDG 316 OAK, 67114
283-0505 82834430617
14 M 2834 44 GS

FRANSEN MO, PAUL H, 209 S PINE, 67114
283-5040 6501710065
46 M 6501 74 FP

GLOVER MO, RICHARD M, AXTELL CL 203 E BROADWAY, 67114
283-2800 1902530297
21 M 1902 53 FP

GRISWOLD MO, OALE G, AXTELL CL 203 E BROADWAY, 67114
283-2800 1902530327
27 M 1902 53 IM

HALE MO, WILLIAM R, BOX 467, 67114
283-2400 1902770581
52 M 1902 79 P

HAMM MO, GLENN, 201 S PINE, 67114
283-3600 1902822042
54 M 1902 87 PO

HAMM MO, ORVAL L, 201 S PINE, 67114
755-2349
23 M 1902 49 FP

IRWIN MO, RICHARD L, 218 S KANSAS, 67114
283-1400 1902753075
48 M 1902 79 OPH

IRWIN MD, SHERYL A, 500 N MAIN, 67114
283-4300
49 F 5404 89 IM

ISAAC MO, CHARLES A, 203 E BROADWAY, 67114
283-2800 1902490341
25 M 1902 49 U

KLIEWER MO, VERNON L, PO BOX 467, 67114
283-2400 1606570585
31 M 1606 58 PA

KUMAR MO, SURINDER, 201 S PINE, 67114
283-3600 49512690016
46 M 1902 78 OBG

LINDHOLM MO, GERALD R, AXTELL CL 203 E BROADWAY, 67114
283-2800 1902760772
51 M 1902 78 FP

MOORE MO, JAMES E, 1901 E 1ST, 67114
283-2400 1902740480
48 M 1902 75 P

MORGAN MO, SCOTT, 201 S PINE, 67114
883-3600 2105791081
00 M IM

NACHTIGALL MD, ANDREW, 201 S PINE, 67114
283-3600 1902590621
28 M 1902 64 PO

OLSON MO, ERWIN T, NO 3 INDIAN LN, 67114
1902470448
19 M 1902 47 00

PRENTISS MO, HAROLD, 1305 TERRACE DR, 67114
283-9433 1720620975
36 M 1720 77 R

QAMAR MO, YUSUF, 203 E BROADWAY, 67114
283-2800 70409610046
38 M 70409 70 IM

SCHMIOT MO, HERBERT R, 413 SE 10TH ST., 67114
1902340463
03 M 1902 34 00

SILLS MO, CHARLES T, 1631 HILLCREST, 67114
1902370524
09 M 1902 37 00

SIMMONS MO, ROBERT EARLE, 209 S PINE, 67114
283-5040 1902742014
49 M 1902 76 IM

STEVENS MO, RONALD, 201 S PINE, 67114
883-3600 64914777249
49 M 64914 87 FP

TANOC JR MO, VALENTIN T, BETHEL CL 201 S PINE, 67114
283-3600 74811620061
39 M 74809 74 U

VOGT MD, VERNON W, BETHEL CL 201 S PINE, 67114
283-3600 3005530864
22 M 3005 55 FP

WHEELER MO, OWIGHT E, 201 S PINE, 67114
283-3600 2012760941
50 M 2012 79 IM

WIENS MO, J WENDELL, 201 S PINE, 67114
283-3600 1902590982
32 M 1902 60 GS

ZAYLOR O O,CHARLES L, 1901 E FIRST, 67114
283-2400
52 M 2878 GS

NORTH NEWTON — 316
(Reno County Medical Society)

FRIESEN MD,ORLANDO J, PO BOX 97, 67117
1902560391
27 M 1902 56 00

NORTON — 913
(Northwest Kansas Medical Society)

COOPER MD,ARTHUR E, 307 W WILBERFORCE, 67654
1611350330
08 M 1611 36 00

HARTLEY MD,ROY W, 711 N NORTON, 67654
927-3305
37 M 1902 64 GP

HARTMAN MD,ROGER L, 711 N NORTON, 67654
877-3305 1902610339
35 M 1902 65 FP

LONG MD,ROBERT C, PO BOX 29, 67654
1902530556
27 M 1902 53 00

NORTONVILLE — 913
(Atchison County Medical Society)

MAOISON MD,WILLARO A, 80X 68, 66060
1902510466
20 M 1902 51 00

OAKLEY — 913
(Northwest Kansas Medical Society)

OHMART MD,RICHARD V, PO BOX 756, 67748
672-3262 1902620636
36 M 1902 63 FP

OBERLIN — 913
(Northwest Kansas Medical Society)

SIMPSON MD,ROBERT LIMBAUGH, 902 W CDLUMBIA PO BOX 110,
67749
475-2221 4706511291
25 M 4706 77 GS

OLATHE — 913
(Johnson County Medical Society)

ARNSPIGER II MD,RICHARD C, 225 W 151ST ST STE 101, 66061
782-8577 1902820031
56 M 1902 GPVS

BYRNES MD,JOHN J, 225 W 151ST STE 406, 66061
791-4220 2846840110
60 M 2846 87 AN

CDE MD,RICHARD O, 2131 E SANTA FE, 66062
829-8505 4804560144
31 M 4804 62 OPH

COPENING MD,TELL B, 225 W 151ST STE 105, 66061
782-7818 1902690219
43 M 1902 70 FP

DELPHIA MD,RDBERT E, 13045 S MUR-LEN RD, 66062
782-1610 1902832196
24 M 1902 56 FP

ELLIS MO, S CHRISTOPHER, PO BOX 519, 66062
373-0263 91707710051
47 M 91707 85 AN

FEEHAN MO,JOHN M, 405 S CLAIRBORNE PO BOX 910, 66061
782-3322 1902840571
57 M 1902 87 FP

FORTUNE MO,CEORIC 8, PO BOX 910, 66061
782-3322 1902660298
40 M 1902 67 FP

FOWLER MO,OENNIS L, 225 W 151ST STE 101, 66062
782-8577 1902731357
48 M 1902 GS

GAUGHAN MO,REBECCA N, 13025 S MUR-LEN #200, 66062
764-2737 3006820343
55 F 3006 87 OTD

HALVORSON MO,HOWARD C, 225 W 151ST STE 201, 66061
782-2020 5404660260
41 M 5404 75 U

HERRON MO,KRISTINE G, 225 W 151ST STE 104, 66061
474-9353 1902840792
57 F 1902 NEP

HUDSON MD,ROBERT P, 12925 FRONTIER RD, 66061
588-7040 1902520313
26 M 1902 52 IM

JENSEN MO,THDMAS M, 225 W 151ST STE 106, 66061
782-1148 3005730464
47 M 3005 75 ORS

KENNEDY MD,FREDERICK R, 225 W 151ST STE 101, 66061
782-8577 1902680493
42 M 1902 GS

KLEINSASSER MD,WARREN L, 14901 W 117TH ST, 66061
764-5555
37 M 2604 88 FP

LAIRO MD,OALE D, 151 W 151ST STE 100, 66061
782-3631 1902680540
42 M 1902 69 OPH

MACFARLANE MO,DOUGLAS B, 225 W 151ST STE 20D, 66061
782-3073 1902800715
54 M 1902 81 08G

MATTHEW MO,WILLIAM L, 405 S CLAIRBORNE, 66061
782-3322 1902560706
29 M 1902 56 FP

MCCANN MO,WILLIAM E, 1006 LENNOX OR, 66062
3901480337
22 M 3901 53 00

MENOLICK MD,R MICHAEL, 225 W 151ST STE 106, 66061
782-1148 1902700788
44 M 1902 71 ORS

MOORE IV MD,JOHN B, 225 W 151ST ST STE 212, 66061
782-0707 1645770338
51 M 1645 83 PS

MORGAN II MO,DAVID LLOYD, 225 W 151ST STE 3D1, 66061
782-8300 2846750161
49 M 2820 75 IM

RHOADS MD, ANNE C, 225 W 151ST ST STE 405, 66061
764-6996 1902831521
57 F 1902 85 GS

RDMONOO MO,STEVEN A, 225 W 151ST STE 406, 66061
791-4220 1902730989
47 M 1902 75 AN

RUHLEN MO,JAMES L, 225 W 151 STE 301, 66061
782-8300 1902720959
46 M 1902 73 IM

SCHAPER MO,DANIEL C, 225 W 151ST STE 106, 66061
782-1148 1902810681
54 M 1902 87 ORS

SEAMAN MO, LAUREN I, 1613 E SHERIDAN, 66062
 6001380051
 07 M 6001 68 00

SHEFFER MO, KEITH D, 225 W 151ST STE 106, 66061
 782-1148 1720671651
 37 M 1720 74 ORS

SNYDER MO, RICHARD H, 225 W 151ST STE 406, 66061
 791-4220 1902731080
 45 M 1902 75 AN

STANOLEE MO, TIM E, 225 W 151ST STE 406, 66061
 791-4220 1902821801
 56 M 1902 85 AN

WOODS MD, S DWIGHT, 225 W 151ST STE 405, 66061
 764-6996 1902551219
 30 M 1902 55 GS

ZIMMERMAN MD, BRUCE E, 225 W 151ST STE 203, 66061
 782-3377 4812781729
 49 M 4812 79 OTO

ONAGA — 913
(Pottawatomie County Medical Society)

BURT MO, RONALD J, 114 W 8TH, 66521
 889-4241 1902840326
 00 M 1902 86 FP

ENGELKEN MO, SUSAN F, 120 W 8TH, 66521
 889-4271 3401790127
 49 F 3401 84 GP

TARVIN MO, RANDY J, 114 W 8TH, 66521
 889-4241
 59 M 1902 89 FP

WALSH MO, THOMAS E, ONAGA CL 100 W 8TH, 66521
 889-4241 1902741212
 48 M 1902 75 FP

OSAGE CITY — 913
(Flint Hills County Medical Society)

ADAMS MO, OWIGHT, 608 HOLLIDAY, 66523
 528-3161
 00 M 1902 56 GP

OSAWATOMIE — 913
(Miami County Medical Society)

APPENFELLER MD, WILLIAM O, 524 BROWN AVE, 66064
 755-3166 1902530033
 25 M 1902 53 FP

BILLINGSLEY JR MD, JOHN A, PO BOX 500 C/O OSAWATOMIE
 HOSP, 66064
 755-3151 1902580090
 31 M 1902 59 ADT

OSWEGO — 316
(Labette County Medical Society)

BURGESS MD, ARTHUR P, PO BOX 126, 67356
 1902520101
 19 M 1902 52 DO

OTTAWA — 913
(Franklin County Medical Society)

GOLLIER II MD, ROBERT A, 1320 S ASH, 66067
 242-1620 1902660344
 40 M 1902 67 FP

HADLEY MD, DELMONT C, 1320 S ASH, 66067
 242-3891 1902640335
 35 M 1902 65 FP

HENNING MO, CALVIN W, PO BOX 2, 66067
 1902350167
 05 M 1902 35 00

RANSOM, WILLARD B, 1320 S ASH, 66067
 242-1620 1902782300
 49 M 1902 79 FP

REYES JR MD, FRANCISCO A, 1320 S ASH, 66067
 242-5312 74801610734
 38 M 74801 74 GS

SPEER MD, LOUIS N, PO BOX 0, 66067
 242-1257 1606411177
 14 M 1606 41 FP

OVERBROOK — 913
(Flint Hills Medical Society)

RUBLE JR MD, JAMES L, OVERBROOK COMM CLINIC, 66524
 665-2205 1902530785
 26 M 1902 53 FP

PAOLA — 913
(Miami County Medical Society)

BANKS MD, ROBERT E, PO BOX 298, 66071
 294-2305 1902550085
 29 M 1902 55 FP

HOLSCHER MD, MARK R, 1313 BAPTISTA, 66701
 294-2000
 55 M 1902 FP

ROWLETT MD, JACK G, PO DRAWER A, 66071
 294-2356 1902520551
 21 M 1902 52 FP

STANLEY MD, REX C, PO DRAWER A, 66071
 294-2056 1902520631
 24 M 1902 52 GS

PARSONS — 316
(Labette County Medical Society)

AVES MD, AGNES, 1509 MAIN, 67357
 421-0600 74801592353
 38 F 74801 72 IM

AVES MD, RENATO B, 1509 MAIN, 67357
 421-0600 74801592264
 35 M 74801 72 GS

CAREY MD, LARRY J, 400 KATY, 67357
 421-2700 1902770271
 51 M 1902 78 FP

CORNELL MD, EARL G, 1509 MAIN, 67357
 421-0600 1902790434
 54 M 1902 83 FP

DAIZ MD, ANTONIO S, PO BOX 935, 67357
 421-4880 74810630918
 37 M 74810 80 OR

DILLON MD, WILLIAM L, LABETTE CO MED CL BOX H, 67357
 421-0881 1902710295
 45 M 1902 73 ORS

KISHORE MD, SHEELA, 2907 JOHNSON RD, 67357
 421-4251 49511660041
 43 F 49511 74 AN

LAVA MD, CHIRUNO, PO BOX 290, 67357
 421-6210 89102630484
 40 M 89102 76 GS

MENON MD, REMA, PARSONS ST HDSP, 67357
 421-6550 49531730126
 47 M 49531 78 GP

MILLER MD, OLAN M, 203 CRESTVIEW, 67357
1902480311
22 M 1902 48 00

MILLER MD, STEPHEN FRANCIS, 1509 MAIN, 67357
421-0600 1902700800
45 M 1902 72 GS

MOSIER MD, KEVIN M, BOX H STE ONE, 67357
421-0881
57 M 1902 88 ORS

PAI MD, RAOHA V, PO BOX 1057, 67357
421-0080 49553700077
45 F 6701 78 AN

PAI MD, VARAOARAJ S, PO BOX 1057, 67357
421-0080 49521650205
42 M 6701 78 U

PARANJOTHI MD, SUBRAMONIAM P, 1509 MAIN, 67357
421-0600 49531650131
39 M 49531 74 IM

PAULS MD, DANIEL N, LABETTE CO MED CTR HWY 59 S, 67357
421-1431 1902710856
45 M 1902 72 IM

ROTHSTEIN MD, TERRY B, PO BOX B, 67357
421-5900 1606691072
43 M 1606 76 OPH

SATYA-MURTI MD, SATYA, LABETTE CO MEO CL HWY 59 SOUTH,
67357
421-8884 49516650078
00 M 49516 N

SHARMA MD, ARUN L, 1509 MAIN, 67357
421-0600 49607690056
46 F 49503 77 FP

TANANUNKUL MD, URAIWAN, PO BOX 256, 67357
421-2460 89101750052
51 M 89101 PO

TANG MD, CHANTRA, PO BOX 1054, 67357
421-2460 89102710321
47 F 89104 82 PO

TANG MD, SAROHO, PO BOX 1054, 67357
421-2460 89102690550
43 M 89102 76 08G

VERMA MD, ASHA, 400 KATY, 67357
421-2700 49530630136
37 F 49530 76 PO

PITTSBURG — 316

(Crawford-Cherokee County Medical Society)

ARMSTRONG MD, HAROLD J, 207-208 PROFESSIONAL BUILDING, 66762
232-2600 1902680035
40 M 1902 69 ORS

BENA MD, JAMES, 405 WEBSTER, 66762
3005360055
12 M 3005 38 00

BERKEY MD, VERNON A, NATL BANK BLDG, 66762
231-7650 1902430080
18 M 1902 43 R

BIERLEIN MD, KENNETH J, 812 S CATALPA, 66762
1606330169
06 M 1606 33 00

COOMER MD, TYLER E, 315 NATL BANK BLDG, 66762
231-7730 2101590189
30 M 2101 65 GS

ERICKSON MD, CLARENCE W, 217 NATL BANK BLDG, 66762
231-7400 1902330140
06 M 1902 33 IM

GOMETZ MD, MODESTO S, PO BOX 1746, 66762
231-2490 72601660025
35 M 72601 71 PD

GRIMALDI MD, GARY A, PITTSBURG ST U STU HLTH CNTR, 66762
223-3100 1902741964
49 M 1902 76 OBG

HOLSINGER MD, DONALD M, 1015 MT CARMEL PL, 66762
231-5900 1902640394
38 M 1902 65 IM

HUEBNER MD, ROBERT STEPHAN, 1015 E MT CARMEL PL, 66762
231-6160 1606670474
42 M 1606 78 GS

HUERTER MD, DAVID F, 909 CENTENNIAL, 66762
231-1650 1902720614
46 M 1902 75 IM

LANCE MD, RAYMOND W, 604 SYCAMORE LANE, 66762
1902470359
22 M 1902 47 00

LEFFLER MD, PAUL B, 309 WINWOOD, 66762
1902400318
02 M 1902 40 00

MCDANIEL MD, R JAMES, PO BOX 1746, 66762
231-2490 1902821178
50 M 1902 85 PD

MENDIOLA MD, AMBROSIO P, MT CARMEL MEO CTR, 66762
231-6100 74810671428
39 M 74810 82 EM

MILLER MD, EARL E, 1803 S COLLEGE TERR, 66762
1902370427
13 M 1902 37 00

MULLER MD, SAMUEL B, 611 W QUINCY, 66762
1902340391
05 M 1902 34 00

NEWMAN MD, CLIFFORD B, 1204 E 7TH, 66762
1902280207
01 M 1902 28 00

ODGERS MD, ROONEY K, 909 CENTENNIAL, 66762
231-4300 1902741697
00 M 1902 75 IM

PAPP JR MD, S OLAN, R 5 BOX 293, 66762
231-7650 1902720908
46 M 1902 80 OR

PARSI MD, MANUTCHEHR, 909 CENTENNIAL, 66762
231-3770 51701640393
38 M 51701 74 GYN

POGSON MD, GEORGE W, RR 3 BOX 23, 66762
1902470464
24 M 1902 47 00

RAMIREZ MD, AUGUSTO H, 909 CENTENNIAL, 66762
231-6280 26407580019
32 M 26407 71 GS

RAMIREZ MD, IRENE P, 909 CENTENNIAL, 66762
231-6280 74801671601
43 F 74801 71 PO

SCHLEMMER MD, ROGER B, 1003 S BROADWAY, 66762
231-6380 1902680884
37 M 1902 68 OPH

SEARLE MD, ROBERT E, 101 N PINE ST, 66762
231-7164
37 M 5101 86 OPH

SEGLIE MD, F RONALD, #3 MEO CENTER CIR, 66762
231-6280
43 M 1902 70 FP

TAWIL MD, ELIAS AOB, 2701 S ROUSE, 66762
231-0850 91502760012
52 M 33004 83 U

TWEET MD, FREDRICK A, RR 5 BOX 196, 66762
231-6100 1602660652
39 M 1602 68 PATH

YAGHMOUR MD, TALAAT E, 2701 S ROUSE, 66762
231-0850 33004640018
40 M 33002 72 U

ZABEL MD, KENNETH P, 909 CENTENNIAL, 66762
231-1650 1902651027
37 M 1902 66 IM

PLAINVILLE — 913
(Central Kansas Medical Society)

KELLY O O, MARK A, 300 S COLORADO, 67663
434-4602
50 M 3979 90 GP
PEPPERSON MO, ARNOLO M, 300 COLORADO, 67663
434-4609 1902510601
22 M 1902 51 FP

PLEASANTON — 913
(Bourbon County Medical Society)

JUSTUS MO, WILLIAM J, PO BOX 407, 66075
352-6134 1902550611
29 M 1902 55 FP

PRATT — 316
(Ninnescah Medical Society)

AMBLER MO, CARL O, PO BOX 364, 67124
672-6476 1902570019
31 M 1902 57 R
BARKER MO, PATRICK N, PO BOX 869, 67124
672-7411 1902710040
45 M 1902 72 GS
BLACK MO, CYRIL V, RR 2, 67124
4802300021
05 M 4802 31 00
BLOOM MO, L THEIL, 1408 E MAPLE, 67124
672-9297 1902570051
32 M 1902 57 R
OILLON MO, STEVEN C, 420 COUNTRY CLUB RD, 67124
672-7417 1902780510
53 M 1902 82 IM
FILLEY MO, VERNON W, LAKE ROAD, 67124
3005430347
13 M 3005 49 00
FREEMAN MO, F GILES, 310 E 2ND, 67124
672-5555 1902440557
18 M 1902 44 FP
MONSOUR MO, JAMES W, 420 COUNTRY CLUB RD PO BOX 825,
67124
672-7415
21 M 3005 GPVS
PAULY MO, TIMOTHY R, 420 COUNTRY CLUB RD, 67124
672-7422 1902821488
56 M 1902 85 FP
ROSEN MO, CARL H, PO BOX 8564, 67124
672-9454 4812721114
46 M 4812 84 U
SUITER MO, DANIEL JAY, 420 COUNTRY CLUB RD, 67124
672-7411 1902711097
44 M 1902 74 GE
THORPE MO, FRANCIS A, 2 LAKE RD, 67124
1606351310
08 M 1606 37 00
WITTMAN MO, A T, 310 E 2ND, 67124
672-5555 1902761604
00 M 87 GS
WOLFF MO, FREDERICK P, 207 EDGEFORD OR, 67124
1902441600
20 M 1902 44 00

PROTECTION — 316
(Iroquois County Medical Society)

GLENN MO, LYLE G, 146 BROADWAY BOX 447, 67127
1606400418
12 M 1606 40 00

QUINTER — 913
(Northwest Kansas Medical Society)

HIESTERMAN MO, HERMAN W, QUINTER CL BLDG 116 E 4TH, 67752
754-3333 1902510318
23 M 1902 51 FP

RANSOM — 913
(Central Kansas Medical Society)

MCLAIN MO, KENNETH, BOX 247, 67572
731-2295 1902460388
21 M 1902 46 FP

RUSSELL — 913
(Central Kansas Medical Society)

HOLLAND JR MO, OAVIO L, 222 S KANSAS STE B, 67665
483-2141 1902840822
57 M 1902 85 IM
MERKEL MO, EARL O, SHIELDS BLDG 326 N MAIN, 67665
483-2178 1902570604
32 M 1902 57 FP
STARKEY MO, JERALD L, 326 MAIN, 67665
483-2178 1902561044
30 M 1902 56 FP
SWANN MO, CLAIR L, 112 W SIXTH, 67665
483-4212 1902390541
13 M 1902 39 IM
WHITE MO, FAGAN N, 356 W 5TH, 67665
702360447
11 M 702 37 00

SABETHA — 913
(Northeast Kansas Medical Society)

KENNALLY MO, KEVIN P, 1115 MAIN, 66534
284-2141 1902780927
53 M 1902 81 FP
MONTGOMERY MO, THOMAS ALLEN, 1013 WYOMING, 66534
1902490490
10 M 1902 49 00
WENGER MO, GREGG O, 1115 MAIN, 66534
284-2141 1902781958
00 M 1902 81 PO
YULICH MO, JOHN O, PO BOX 227, 66534
284-2125 1902591016
33 M 1902 61 FP

SALINA — 913
(Saline County Medical Society)

ABBOTT O O, GREGORY A, 130 W CLAFLIN, 67401
825-7251 2878820072
55 M 2878 88 FP
ALSOP MO, WILLIAM R, PO BOX 260, 67402
827-7261 1902770042
52 M 78 GE
ANDERSON MO, JOOY, PO BOX 260, 67402
827-7261 1902590010
32 F 1902 64 IM
BAXTER MO, W REESE, PO BOX 1847, 67402
825-8221 1902730083
47 M 1902 74 FP

BELL MO, MARK G, 909 E WAYNE, 67401 823-7225 1902751595 50 M 1902 77 ENT	FERGUSON OO, ELAINE L, PO BOX 1847, 67402 825-5717 2878830299 00 M 2878 IM
BLOMQUIST MO, GLENOA L H, 1508 E IRON, 67401 827-1193 1902852031 56 F 1902 86 P	FRANCIS MO, ANTHONY E, PO BOX 2478, 67401 823-1025 1902770484 54 M 1902 82 ORS
BOSSEMEYER II MO, CHARLES H, 617 E ELM PO BOX 1847, 67401 825-8221 1902780200 49 M 1902 84 FP	FREEMAN MO, RAYMONO S, 1901 E IRON, 67402 702500192 20 M 702 59 00
BROWN MO, ROBERT WAYNE, 910 MARYMOUNT RO, 67401 1902550174 23 M 1902 55 00	GANS MO, FREDERICK A, 950 S ELEVENTH, 67401 2834460354 22 M 2834 51 00
BRUNGAROT MD, BERNARD A, 400 E BELOIT, 67401 3006460045 21 M 3006 46 00	GARLOW MO, WILLIAM B, PO BOX 2327, 67402 827-9526 1902820554 55 M 1902 87 R
BURNETT OO, LARRY E, 671 ELMORE OR, 67401 823-7470 2879840425 58 M 2879 85 FP	GRANT MO, MICHAEL O, 1001 S OHIO, 67401 827-6453 51 M 1902 82 FP
BYERS MO, JONELL, 833 ELMHURST, 67401 823-8140 1902781991 53 F 1902 79 0	GRIFFITH MD, FRANK H, 1493 E IRON, 67401 827-0488 4813750321 45 M 4813 76 OPH
CANNAOAY MO, JOHN J, PO BOX 2327, 67402 3901840309 56 M 3901 85 R	GUNN MO, MARVIN R, 2142 EDGEHILL RO, 67401 3901540291 28 M 3901 63 00
CATHCART-RAKE MO, WILLIAM F, BOX 260, 67402 827-0260 1902740895 48 M 1902 75 IM	HAM MO, ROBERT E, 1001 S OHIO, 67401 827-6453 1902860718 53 M 1902 GP
CLARK MO, OAVIO H, PO BOX 1847, 67402 825-8221 1902620091 36 M 1902 63 FP	HARBIN MO, GARY LYNN, 523 S SANTA FE, 67401 823-7213 1902752109 50 M 1902 77 ORS
CONNER MO, BRIAN, 1518 B EAST IRON, 67401 825-2020 1902720231 46 M 1902 73 OPH	HASSLER MO, RANOE O, 645 E IRON, 67401 827-9635 1902710465 45 M 1902 78 U
COOPER MO, JAMES L, PO BOX 2027, 67402 823-7201 1902820376 56 M 1902 83 PATH	HATTON MO, LLOYD W, 709 HIGHLAND, 67401 1902330204 06 M 1902 33 00
COSSETTE MO, JERROLO E, 909 E WAYNE, 67401 823-7225 1902751781 46 M 1902 76 ENT	HOOGES MO, MERLE A, PO BOX 1845, 67402 825-9024 1902580421 34 M 1902 66 08G
CULTRON MO, FRANK T, 837 O FAIROALE RO, 67401 1643380214 10 M 1643 47 00	HOOGES MO, MERLE J, 430 S 7TH, 67401 825-9024 1902830843 58 M 1902 84 08G
O'SOUZA MO, BISMARCK C, PO BOX 2327, 67402 827-9526 49501680370 45 M 49501 78 R	HOUSE MO, R E, PO BOX 2327, 67401 827-9526 1902810427 54 M 1902 82 OR
DEES MO, DANIEL J, PO BOX 1757, 67401 825-7251 1902800278 55 M 1902 81 FP	HUNNINGHAKE MO, RONALD, 512 CRESTWOOD OR, 67401 823-5283 1902760616 51 M 1902 82 FP
DENNIS MO, OAVIO T, 737 E CRAWFORD PO BOX 260, 67401 827-7261 1902780501 53 M 1902 78 IM	HUTCHINSON MO, OIRK T, 135 E CLAFLIN, 67401 827-9631 3901740541 48 M 3901 78 IM
DETURK MO, OWAYNE L, PO BOX 2327, 67401 827-9526 3005830272 51 M 3005 84 R	JERKOVICH MO, GEORGE S, 1508 E IRON, 67401 827-1193 1902830959 57 M 1902 87 P
DRAEMEL MO, H RICHARD, 2203 EDGEHILL RO, 67401 827-0307 1902530246 18 M 1902 53 070	JETER MO, JOHN, 1500 MARYMOUNT RO, 67401 827-4411 1902810435 55 M 1902 82 EM
DREHER MO, HENRY S, PO BOX 260, 67402 827-7261 1902430284 18 M 1902 43 IM	KELLERMAN MD, RICK, 130 W CLAFLIN BOX 1757, 67402 825-7251 1902780919 00 M 1902 81 FP
EATON MO, GLEN E, 4353 E NORTH ST, 67401 1902540268 28 M 1902 54 00	KNOX MO, JEFFREY B, 737 E CRAWFORD, 67401 827-7261 1902841039 57 M 1902 85 08G
EATON MO, LESLIE F, RR 1 BOX 346, 67401 1902320152 06 M 1902 34 00	KREHBIEL MO, MARK A, PO BOX 1847, 67402 825-8221 1902742162 49 M 1902 76 FP
ELLISON MO, PAUL O, 1499 E IRON, 67401 825-7271 2105600421 35 M 2105 67 OPH	KRUCKEMYER MO, ALAN L, 645 E IRON, 67401 823-2215 1103710291 45 M 1103 77 ORS
FEIGHNY MD, ROBERT E, 2437 VILLAGE, 67401 1902510181 20 M 1902 51 00	LAWRENCE MO, LINDA M, 929 ELMHURST, 67401 823-1600 84802821111 57 F 4802 86 OPH

LAWRENCE MD, MICHAEL K, 645 E IRON, 67401
827-7255 2802840520
00 M IM

LIVINGSTON MO, CHARLES E, 400 E IRON, 67401
823-9166 1611570801
32 M 1611 64 GS

MACY MO, NORMAN E, PO BOX 2027, 67402
827-4053 1902600449
35 M 1902 64 PATH

MACY MO, TEO L, PO BOX 260, 67402
827-7261 1902710660
43 M 1902 73 GS

MANGUOGLU MO, ALI B, PO BOX 223B, 67401
823-1032 90205760015
53 M 90205 85 N

MARCHBANKS MO, DONALD L, 520 COUNTRY CLUB RD, 67401
1902510474
24 M 1902 51 00

MARSHALL MD, GEORGE W, PO BOX 1845, 67402
825-9024 1902700745
44 M 1902 71 08G

MARTIN MO, OLIVER L, 715 E REPUBLIC, 67401
1902370371
08 M 1902 38 00

MATTHEWS MO, EARL H, 135 E CLAFLIN, 67401
827-9631 1902742308
49 M 1902 78 GS

MAXWELL MO, GORDON E, 135 E CLAFLIN, 67401
827-9631 1902550778
29 M 1902 55 08G

MCCRACK MD, SPENCER C, 655 GUERNSEY OR, 67401
3509430810
18 M 3509 52 00

MILLER MD, ELOEN V, 1928 RIDGELEA, 67401
1902441031
19 M 1902 44 00

MOWERY MD, WILLIAM E, PO BOX 260, 67402
827-7261 1902470391
23 M 1902 47 GS

NEIS MD, PAUL R, 909 E WAYNE, 67401
823-7225 1902821364
56 M 1902 88 0T0

NELSON MD, DOUGLAS LEROY, PO BOX 2327, 67402
827-9526 1902841314
58 M 1902 87 DR

NEUMANN MO, JAMES W, 600-E SOUTH SANTA FE, 67401
825-5041 1902560820
24 M 1902 83 N

NICKELL MO, WENDELL K, 400 E IRON, 67401
823-9166 1606511201
26 M 1606 51 TS

NIXON MO, RICHARD R, BOX 2327, 67402
827-9526 1643570510
32 M 1643 65 R

NULL MD, WILLIAM G, 135 E CLAFLIN, 67401
827-9631 102570413
31 M 102 66 PO

PALMER MD, GERALD K, 1952 RIDGELEA OR, 67401
1803530765
24 M 1803 61 00

PEREZ-TAMAYO MO, CLAUDIO A, 139 N PENN, 67401
827-5591 1611812431
57 F 1611 RO

PETERSON MD, JAMES E, PO BOX 2327, 67402
827-9526 1902781451
53 M 1902 82 DR

REECE MO, RICHARD J, 502 BEECHWOOD, 67401
1902490554
23 M 1902 49 00

RICHARDS MO, JON F, 135 E CLAFLIN, 67401
827-9631 1902752664
50 M 1902 IM

RODERICK MO, JAMES E, 645 E IRON, 67401
827-9635 1902470511
23 M 1902 47 U

ROMEISER MO, REX S, 645 E IRON, 67401
827-9635 1902670854
41 M 1902 68 U

ROSALES MO, J EOGAR, 737 E CRAWFORD, 67401
827-7261 17601740061
00 M PD

SCHMIDT MO, RAMON WARNER, 400 E IRON, 67401
823-9166 1902650802
39 M 1902 66 GS

SCOTT MO, CHESTER E, 858 S 11TH, 67401
1902510725
23 M 1902 51 00

SEATON MO, ROBERT O, PO BOX 260, 67402
827-7261 1902781664
00 M 83 NEP

SEBREE MO, STEVEN G, PO BOX 260, 67401
827-7261 1902731047
47 M 1902 74 08G

SHAFFER MO, JAMES J, PO BOX 676, 67401
827-0346 1902851603
00 M 1902 FP

SHERIDAN MO, KIM M, PO BOX 1966, 67402
827-3203 1902852219
56 M 1902 88 AN

SLOO MO, MILO G, 645 E IRON, 67401
823-2215 1902670889
41 M 1902 68 ORS

SMITH MO, ROY E, BOX 2027, 67402
827-4053 3005720841
46 M 3005 78 PATH

SMITH MD, DAVID E, PO BOX 260, 67402
827-7261 1902761272
50 M 1902 77 GS

SMITH MO, HAROLD R, 608 STARLIGHT, 67401
1902510733
19 M 1902 51 00

STOSKOPF MO, LAWRENCE E, 2413 EDGEHILL, 67401
823-9498 1902721084
39 M 1902 73 AN

WAGENBLAST MO, HOWARD R, PO BOX 260, 67402
1902490694
21 M 1902 49 00

WATERS MO, CLARENCE N, 833 MANOR RD, 67401
2834481114
13 M 2834 60 00

WEBER MD, ROBERT W, 645 E IRON, 67402
827-7255 1902490716
26 M 1902 49 IM

WEDEL MO, ALAN K, 671 ELMORE OR, 67401
823-7470 1902821933
56 M 1902 86 FP

WOODALL MO, DENNIS C, PO BOX 1847, 67402
825-8221 1902831971
55 M 1902 84 FP

YAPLE JR O O, RICHARD A, 135 E CLAFLIN, 67401
827-9631 2878831287
54 M IM

JABEL MD, JUVENAL T, SATANTA MED CNTR, 67870
649-2771 74809680111
43 M 74809 79 IM

SATANTA — 316
(Southwest Kansas Medical Society)

SCOTT CITY — 316

(Southwest Kansas Medical Society)

OUNN MO, DANIEL R, 202 COLLEGE, 67871
 872-2187 1902740232
 49 M 1902 75 FP

HOPKINS JR MO, B MORRISON, 804 CRESCENT, 67871
 1902530408
 23 M 1902 53 00

SEDAN — 316

(Southeast Kansas Medical Society)

TAYLOR MO, ELMER W, 120 W OSAGE BOX 8, 67361
 725-3141 512570879
 28 M 512 62 GP

WALKER MO, WILLIAM K, 417 N MONTGOMERY, 67361
 1902450722
 18 M 1902 45 00

SENECA — 913

(Northeast Kansas Medical Society)

BERKLEY MO, NORMAN W, 15 SOUTH 5TH ST, 66538
 336-2128 1902630054
 31 M 1902 64 FP

GILBERT MO, J HOWARD, 211 S FOURTH, 66538
 1902410194
 05 M 1902 41 00

MCGEENEY MO, TERRY L, 201 N 6TH, 66538
 336-6113 1902771774
 51 M 1902 78 FP

MENZEL MO, THOMAS E, 511 WALNUT, 66538
 336-6277 1902821241
 52 M 1902 GS

SHARON SPRINGS — 913

(Northwest Kansas Medical Society)

CHUNG MO, JOHN J, WALLACE CO MEO CL BOX 310, 67758
 852-4214 58301480022
 23 M 58301 60 FP

SHAWNEE MISSION — 913

(Johnson County Medical Society)

ALLEN MO, JAMES V, 12014 FARLEY, 66213
 541-5934 2002780014
 46 M 2002 0

ALLEN MO, MARK L, 11111 NALL STE 222, 66211
 491-3999 1902801410
 53 M 1902 83 AN

ALLEN MO, MAX S, 5103 W 96TH TERR, 66207
 1902370010
 11 M 1902 37 00

ALLIN MO, OENNIS M, 8623 ALOEN, 66215
 588-6500 1902830029
 57 M 1902 EM

ALTENBERNO MO, ELVIN C, 7319 W 81ST, 66204
 648-2010 1902540012
 26 M 1902 54 FP

AMAOO MO, MERCEDES C, 5520 COLLEGE BLVD STE 110, 66211
 491-3300 2803830013
 55 F 2803 88 A

ANDERSON MO, WILLIAM A, 2508 W 71ST, 66208
 236-7288 2846760191
 50 M 2846 83 EM

ATHON MO, MERRILL O, 6806 W 83RD, 66204
 642-4242 1902540047
 24 M 1902 54 FP

AUSTENFELT MO, JENNIFER, PO BOX 2923, 66201
 676-2340
 57 F 1902 89 PATH

BAEEN II MO, LOUIS JOHN, 10600 QUIVIRA RD #460, 66215
 541-3220 2846740026
 49 M 2846 78 OPH

BAEKE MO, JOHN O, 6806 WEST 83RD, 66204
 642-4242 1902520038
 19 M 1902 52 FP

BAKER MO, WILLIAM STEVEN, 7700 W 63RD STE 209, 66204
 262-1843 702730066
 47 M 702 76 P

BALANOFF MO, ARNOLO Z, 4601 W 109TH STE 122, 66211
 491-4045 1803670061
 42 M 1803 72 PO

BALOWIN MO, THOMAS F, 8901 W 74TH STE 21, 66204
 722-0080 1902830142
 56 M 1902 84 IM

BANSAL MO, ROOPA O, 5600 W 95TH STE 105, 66207
 381-6765 49504560146
 37 F 49504 80 FP

BANSAL MO, SATISH C, 8901 W 74TH STE 147, 66204
 384-2220 49541610048
 38 M 49541 74 ORS

BAPTIST MO, JEREMY E, 5811 OUTLOOK, 66202
 432-0625 2846780729
 40 M 2846 79 A

BARE II MO, CHARLES E, 8901 W 74TH STE 353, 66204
 677-2460 1902690057
 43 M 1902 70 U

BARKER MO, ELIZABETH B, 4121 WEST 83RD STE 123, 66208
 381-6669 4706550122
 30 F 4706 66 P

BARNETT JR MO, THOMAS E, 10600 QUIVIRA STE 240, 66215
 541-3355 2846750251
 52 M 1902 80 GE

BARNHART MO, RONALD J, 9119 WEST 74TH STE 268, 66204
 831-2334 2501680136
 41 M 2501 69 OBG

BARR MO, RICHARD N, 7301 MISSION STE 119, 66208
 432-4366 1902570043
 32 M 1902 57 OPH

BARRICK MO, BRUCE, SH MSN MEO CTR PO BOX 2923, 66201
 676-2340 1902650021
 39 M 1902 66 PATH

BATTY MO, LARRY H, 9119 W 74TH STE 268, 66204
 831-2334 1902760110
 51 M 1902 77 OBG

BAUER MO, LAFE W, 4818 W 80TH, 66208
 1902490023
 20 M 1902 49 00

BAUER MO, LAIRO A, 8800 W 75TH STE 300, 66204
 722-4240 1902860106
 56 M 1902 89 IM

BECKER MO, NANCY J, 5520 COLLEGE BLVD #350, 66211
 661-9980 1902820139
 48 F 1902 87 IM

BEEZLEY MO, MICHAEL J, 8800 W 75TH STE 115, 66204
 262-9201 1902730105
 47 M 1902 74 GPVS

BELL MO, O W, 7000 W 121ST ST, SUITE 100, 66209
 469-1020 1902680078
 42 F 1902 69 OPH

BELT MO, ROBERT J, 12000 W 110 #400, 66210
 469-8023 702710073
 45 M 702 75 ON

BELZER MO, EDWARD G, 10600 QUIVIRA STE 330, 66215 541-3300 3005620081 36 M 3005 67 PO	CIROTSKI MO, GREGORY A, 9119 W 74TH STE 250, 66204 584-5500 3006840166 58 M 3006 87 PO
BICHLMEIER MO, FRANKLIN G, 8901 W 74TH STE 272, 66204 362-0500 1902580081 33 M 1902 59 GS	COHEN MO, ROBERT A, 3700 W 83RD STE 110, 66208 642-2100 2803640036 39 M 2803 70 PO
BIKALES MO, VICTOR WILLIAM, 10688 RIGGS OR, 66212 383-1311 2105390036 13 M 2105 78 P	COLEMAN MO, ROBERT L, 8901 W 74TH STE 1, 66204 362-0100 4113660193 41 M 4113 79 PS
BILLINGSLEY MO, THAO H, 4501 COLLEGE BLVD #350, 66211 661-9669 1902660115 41 M 1902 67 P	COOLEY MO, OAVIO A, 5520 COLLEGE STE 350, 66211 661-9980 2802660131 40 M 2802 72 RHU
BISHOP MO, FRANCIS E, 3208 W 83 TERR, 66206 1902450064 20 M 1902 45 00	COOPER MO, JACK R, 5300 MISSION RD, 66205 3840430251 17 M 3840 52 00
BISHOP MO, HENRY R, 10600 QUIVIRA STE 320, 66215 541-3200 4813790128 53 M 4813 82 08G	CORDELL MO, LARRY O, 12301 W 106TH ST STE 100, 66215 888-2800 41 M 1902 90 ORS
BLETZ MO, DONALD B, 10550 QUIVIRA STE 510, 66215 492-6200 5104580116 28 M 5104 72 IM	COULTER MO, HENRY F, 4203 W 151 ST, 66224 1902510113 23 M 1902 51 00
BOLES MO, J MICHAEL, 5949 NIEMAN, 66203 631-1300 1902610088 35 M 1902 62 FP	COULTER MO, THOMAS B, 7504 ANTIOCH, 66204 341-0931 1205640165 38 M 1205 72 OPH
BOTTS MO, LARRY O, 8901 W 74TH #348, 66204 432-8000 3005790092 52 M 3007 PUO	COX JR MO, IRA, 5829 WOODSON PO BOX 975, 66202 722-1100 1902490180 19 M 1902 49 FP
BROWN MO, WILLIAM R, 7301 MISSION STE 339, 66208 236-8866 1902480079 23 M 1902 48 IM	OAVIA MO, JAMES E, 10550 QUIVIRA STE 510, 66215 492-6200 1611620361 37 M 1611 85 CO
BROXTERMAN MO, STEVEN JOSEPH, 9119 W 74TH STE 150, 66204 362-5510 1902760217 51 M 1902 77 FP	OEITZ MO, MICHAEL R, 5700 BROOKMOOR OR STE 912, 66202 432-0212 4101580216 32 M 4101 62 OPH
BRUMMETT MO, RICHARD R, 9200 INDIAN CREEK PKWY STE 200, 66212 451-2020 1902640084 34 M 1902 65 FP	OENISON MO, TERRY R, 5811 OUTLOOK, 66202 432-0625 1902560307 29 M 1902 56 A
BRUN MO, MICHAEL E, PO BOX 29194, 66201 676-2310 2802810141 55 M 2802 86 OR	OENNIS MO, MICHAEL W, PO BOX 29194, 66201 676-2310 57 M 2846 83 OR
BRUNING MO, DANIEL L, 11364 W 121ST TERR, 66213 268-0500 2834820105 56 M 2834 84 AN	OERRINGTON MO, KENNETH L, 4601 W 109TH STE 310, 66211 491-6464 1902710287 44 M 1902 72 FP
BRUNING MO, ROGER MARION, 7301 MISSION STE 342, 66208 384-0745 1902760225 48 M 1902 79 FP	OIEHL MO, ANTONI M, 13106 W 75TH TERR, 66216 24 M 2604 53 POC
BUBB MO, STEPHEN K, 8901 W 74TH STE 3, 66204 362-0031 1902740135 48 M 1902 76 ORS	OOCKHORN MO, ROBERT J, 5300 W 94TH TERR, 66207 381-4674 1902600236 34 M 1902 61 POA
BUCKMAN MO, MARTIN SPALDING, 10600 QUIVIRA STE 240, 66215 541-3355 2803760066 49 M 2802 75 IM	OONLEY MO, JAMES L, 8340 MISSION RD STE 201, 66206 648-2892 1902720347 46 M 1902 73 P
BURGER MO, PAUL B, 5638 NIEMAN RD PO BOX 3278, 66203 631-6114 2834500101 25 M 2834 50 FP	ORAKE MO, CYNTHIA K, 9119 W 74 #300, 66204 677-1500 2846810181 57 F 1902 83 08G
BUSER MO, WILLIAM O, 12000 W 110TH STE 200, 66210 469-1477 1902800146 55 M 1902 83 GE	ORASIN MO, OENA K, 7301 MISSION RD STE 320, 66200 362-1444 2002800341 40 F 2002 85 CHP
BUTRICK MO, CHARLES W, 10600 QUIVIRA STE 320, 66215 541-3200 55 M 1902 88 08G	OREILING MO, ROGER J, 8901 W 74TH STE 21, 66204 722-0080 1902780552 51 M 1902 79 CD
CALKINS MO, LARRY L, 5635 SUWANEE, 66205 1902430187 18 M 1902 43 00	DUCKETT II MD, THOMAS G, 7000 W 121 ST #110, 66209 469-1020 1902670145 41 M 1902 68 OPH
CASTEEL MD, CHARLES K, 8901 W 74TH STE 32, 66204 831-1003 3901590141 34 M 3901 64 U	OUOGEON MD, MAUREEN, 8901 W 74TH STE 124, 66204 362-2035 1902770417 51 F 1902 78 IM
CATTANEO MD, ERNEST A, 9119 W 74TH STE 360, 66204 262-3930 1902650110 39 M 1902 66 IM	DUNCAN MD, KIRK A, 8800 W 75TH STE 115, 66204 474-9353 1902780561 53 M 1902 83 NEP
CEORLIND MD, CRANSTON JAY, 8901 W 74 STE 36, 66204 236-6455 1902710198 45 M 1902 72 08G	DURKEE MO, BRUCE W, 10550 QUIVIRA STE 510, 66215 492-6200 1902790574 52 M 1902 82 AN

EMMOTT MO,DAVID F, 8901 W 74TH STE 32, 66204
831-1003 3901790476
53 M 3901 81 U

ENOERS MO,WRAY, 9034 COTTONWOOD DR STE 2, 66215
1902360138
02 M 1902 36 00

ESRIG O.D., HAROLO L, 8132 SAGAMORE, 66206
2878600013
30 M 2878 62 00

ETZENHOUSER III MO,RUSSELL O, 10600 QUIVIRA STE 330, 66215
1902590273
34 M 1902 64 PO

EVANS JR MO,WILLIAM E, 7301 MISSION RD #208, 66208
362-7363 1902580294
24 M 1902 59 FP

EVANS MO,CAROL ANN, 8901 W 74TH STE 124, 66204
362-0000 2846780222
54 F 2846 82 IM

FOROYCE MD,NORMAN, 8901 W 74TH ST STE 145, 66204
722-0020 1902670251
41 M 1902 67 OTD

FRANCISCO MO,CLARENCE L, 3509 W 85TH, 66206
1902340145
09 M 1902 34 00

FRANKEL MO,SCOTT J, 4601 W 109TH STE 318, 66211
491-5501 2802790387
53 M 2802 84 A

FRIESEN MO,STANLEY R, 48 LE MANS CT, 66208
1902430306
18 M 1902 43 GS

GAGE MO,ETSE M, 9119 W 74TH STE 250, 66204
384-5500 1902800375
55 F 1902 84 PD

GALLEHUGH MO,KEITH W, 9027 BIRCH, 66207
381-0744 1902570281
32 M 1902 57 R

GARCIA-FERRER MO,FRANCISCO, 10616 W 87TH ST, 66214
642-5000 27501601638
32 M 27501 73 FP

GAUGHAN MO,MICHAEL J, 11880 COLLEGE BLVD STE 410, 66201
469-8998 1902741549
49 M 1902 77 R

GENTRY MO,KALE C, 6806 W 83RD, 66204
642-4242 1902600244
31 M 1902 60 FP

GERJARUSAK MD,PRAPAS, 8901 W 74TH STE 121, 66204
262-0344 89104710086
46 M 89101 75 IM

GIBBONS MO,ROBERT T, 8800 BALLENTINE, 66204
894-4050
43 M 1902 69 AN

GILLEN MD,BILLY A, 8802 BIRCH LN, 66207
381-0521 1902540365
29 M 1902 54 AN

GOERTZ MO,LEO R, 6340 ASH, 66208
1902520275
22 M 1902 52 00

GOLDSTEIN MO,GERALD L, 4601 W 109TH STE 318, 66211
491-5501 16504760069
47 M 16504 81 P

GOMEZ MD,FRANCISCO, 4200 SOMERSET #160, 66208
649-7300 26401400019
15 M 26401 63 P

GOOD MO,WENDELL LISLE, 4601 W 109TH STE 212, 66211
491-9183 1902480214
24 M 1902 48 FP

GDOOWIN MD,JOHN A, 10600 QUIVIRA STE 330, 66215
541-3300 1902860645
60 M 1902 88 PO

GRAHAM MO,BRUCE O, 10550 QUIVIRA STE 360, 66215
599-5012
51 M 2803 87 GS

GRASHOFF MD,JOYCE A, 11116 W 114TH, 66210
596-4180 3005800101
59 F 3005 83 EM

GRIN MO,TRUDI R, 10550 QUIVIRA STE 335, 66215
888-1888
57 F 2846 86 PO

GROSSMAN MD,HARVEY M, 4601 W 109TH STE 122, 66211
491-4045 1902742243
49 M 1902 77 PO

GRUNOMEIER MO,ANNETTE M, 9119 W 74TH STE 210, 66204
432-3334 1611770916
46 F 1611 79 PO

HACKER MO,DAVID C, PO BOX 2923, 66201
676-2479 1902752079
50 M 1902 78 AN

HALLERAN III MO,WILLIAM J, 11880 COLLEGE BLVD STE 410,
66201
469-8998 1902780749
53 M 1902 80 OR

HAMIL MD,LAWRENCE W, 10550 QUIVIRA RD STE 460, 66215
341-3937 2803610251
36 M 2803 69 PO

HAROLD MO,CREIGHTON A, 8229 NALL AVE, 66208
5605430432
18 M 5605 48 00

HARMS MO,ALBERT C, 4200 W 91ST, 66207
1902380180
13 M 1902 38 00

HARRIS MO,MARGARET H, 10600 QUIVIRA STE 32D, 66215
541-3200 1902840725
58 F 1902 08G

HARTMAN MD,GERALD V, 6616 EL MONTE, 66208
1902450331
20 M 1902 45 00

HARTONG MO,TD8Y JOSEPH, 8901 W 74TH STE 328, 66204
384-1441 1902780765
53 M 1902 83 OPH

HARTONG MO,WILLIAM A, 8901 W 74TH STE 372, 66204
831-9300 1902710457
44 M 1902 72 IM

HATHAWAY MO,PETER, 11055 CEDAR STE 216, 66211
491-3380 3503600195
31 M 3503 74 IM

HEISLER MO,NORMAN T, 8901 W 74TH STE 269, 66204
362-4040 3005800632
55 M 3005 84 P

HESSER MO,HERBERT H, 7207 EDGEWOOD, 66203
1902340242
06 M 1902 34 00

HETTINGER MO,MICHAEL E, 7504 ANTIOCH, 66204
341-3100 4706750431
46 M 4706 81 OPH

HILL MD,ROONEY W, 8901 W 74TH STE 208, 66204
362-0300 1902741573
47 M 1902 75 IM

HITCHCOCK MO,C THOMAS, 8901 W 74TH STE 356, 66204
677-2508 1902730521
47 M 82 GS

HOBSON MD,MILBURN W, 9119 W 74TH STE 268, 66204
831-2334 1902550522
30 M 1902 55 08G

HODES MD,HERBERT C, 484D COLLEGE STE 100, 66211
491-6678 1902690553
43 M 1902 70 08G

HOLMAN MO,JON B, 6000 LAMAR, 66202
782-2100
33 M 1902 64 P

HODD MO,ROGER W, 8300 COLLEGE STE 105, 66210
451-9310 1643740431
48 M 1643 76 ORS

HOPKINS MO, LENLY, 7312 ANTIOCH, 66204 722-6121 3841560344 30 M 3841 65 GS	KUEBLER MO, KEVIN M, 9359 W 75TH, 66204 341-0120 2101750658 50 M 2101 82 COTS
HOPKINS MO, WILLIAM O, 8575 W 110TH STE 306, 66210 451-1919 2803610358 33 M 2803 72 ORS	KURTH MO, ROBERT H, 5555 W 58TH, 66202 432-2080 3005530376 28 M 3005 59 IM
HOUSTON II MO, LAWRENCE MORLEY, 5520 COLLEGE BLVD #460, 66211 451-1311 2803760449 50 M 2803 79 FP	LAPI MD, ANGELO, 5918 REEFS RD, 66203 753-5700 13 M PATH
HUSEMAN MO, RICHARD ALLAN, 8901 W 74TH STE 357, 66204 831-2430 1720720961 46 M 1720 75 NEP	LAPI MO, RUTH M, 2012 STRATFORD RD, 66208 4107370141 14 F 4107 50 00
INNES MO, ROBERT C, 10226 BRIAR, 66207 2802490294 25 M 2802 66 00	LARSON MO, OANUTA OKTAWIEC, 5848 FONTANA DR, 66205 22 F 80303 61 00
JACKSON MO, ROBERT V, 8901 W 74TH STE 10, 66204 362-1660 2803770401 49 M 2803 80 PO	LASH MO, RAY E, 8901 W 74TH STE 21, 66204 722-0080 1902752338 50 M 1902 76 CO
JANES MO, DONALD R, 10550 QUIVIRA #310, 66215 492-1955 1902600350 34 M 1902 62 OBG	LEAHY MO, JAMES O, 12210 W 87 PARKWAY #135, 66215 342-7184 3005790823 48 M 3005 PS
JOHNSON MO, JOHN E, 6636 GOODMAN, 66203 281-8814 4706430453 17 M 4706 57 PATH	LEE MO, JAMES G, 5700 METCALF CT, 66202 1902440867 18 M 1902 44 00
JOHNSON MO, NAOMIE, 10550 QUIVIRA STE 510, 66215 492-6200 1903630565 38 F 1803 IM	LEGASPI JR MO, PEDRO L, 9100 W 74TH PO BOX 2923, 66201 676-2479 74801600127 36 M 74801 71 AN
JOHNSON MO, PAMELA MCKENZIE, 8901 W 74TH STE 10, 66204 362-1660 58 F 1902 87 PO	LEMOINE JR MO, ALBERT N, 9254 HIGH DR, 66206 2802430992 18 M 2802 47 00
JONES MO, CHARLES E, 9100 W 74TH PO BOX 2923, 66201 676-2214 1902600368 31 M 1902 61 FP	LEO MO, WILLIAM A, 4505 W 66TH, 66208 1902520445 22 M 1902 52 00
JONES MO, H IVOR, 8901 W 74TH STE 269, 66204 362-4040 80303510072 24 M 80303 59 P	LESTER MO, JOHN BUCKLES, 4140 W 71ST STE 108, 66208 432-7276 1902700681 45 M 1902 71 P
KARLIN MO, CHARLES A, 11880 COLLEGE BLVD STE 410, 66201 469-8998 1902752265 49 M 1902 76 OR	LEWIN MO, WALTER, 8901 W 74TH STE 269, 66204 362-4040 1902560668 30 M 1902 56 P
KASHYAP MO, BANSHI PRASAD, 8901 W 74TH STE 257, 66204 236-4500 49554710017 47 M 49554 78 IM	LIPSEY MD, JAMES H, 9119 W 74TH STE 350, 66204 831-3500 1606560687 31 M 1606 73 ORS
KATZ MO, ARNOLD L, 10550 QUIVIRA RD #470, 66215 888-3231 44 M 5101 RHU	LOHRBERG MO, JOHN R, 8704 BOURGEOIS, 66219 599-5500 3005860732 55 M 3005 89 FP
KATZ MO, FRED S, 8901 W 74TH STE 145, 66204 722-0020 1902791066 00 M 1902 58 OTO	LOTUACO MD, GAMALIEL G, 5520 COLLEGE BLVD #232, 66211 491-6373 74801641184 41 M PS
KELLEY MO, GORDON R, 8800 W 75TH STE 100, 66204 491-4330 6002770014 52 M 6002 83 N	LULO MO, ANTONIO R, 7600 STATE LINE STE 150, 66208 649-3900 30801600464 35 M 30801 72 IM
KENNY MO, LAURA M, 9119 W 74 #300, 66204 677-1500 1902831009 56 F 1902 87 OBG	LUNO MD, STEPHEN B, 9100 W 74TH ST, 66201 676-2214 47 M 2604 90 EM
KETCHUM MD, LYNN O, 12301 W 106TH STE 201, 66215 492-3737 2101600524 36 M 2101 69 PS	MACARTHUR MD, RICHARD I, 10550 QUIVIRA STE 510, 66215 492-6200 1902730709 46 M 1902 74 COTS
KOCH MO, KEVIN J, 9100 W 74TH, 66201 676-2214 55 M 2846 EM	MACDOUGALL MO, MARGARET L, KUMC 39TH & RAINBOW, 66202 588-6074 1902771723 48 F 1902 82 NEP
KODANAZ MO, A AYTEKIN, 5710 REINHARDT DR, 66205 596-4100 90201550695 28 M 90201 70 AN	MANCINA MO, MICHAEL S J, 10550 QUIVIRA STE 360, 66215 599-2222 2604772675 46 M 2604 89 CD
KOZIKOWSKI MO, BEN M, 7301 MISSION RD STE 348, 66208 362-8317 2834550477 30 M 2834 62 ORS	MANTZ MD, FRANK A, 9309 W 103RD, 66212 4101380691 12 M 4101 61 00
KRUEGER MO, KURT ALLEN, PO BOX 2923, 66201 676-2479 3006740536 48 M 3006 78 AN	MASTERS MD, FRANCIS W, 6738 RAINBOW, 66208 3545450321 20 M 3545 58 00
KUBIN MO, MORIS A, 2504 W 71ST, 66208 1902430446 15 F 1902 43 00	MATHEWS MO, ROBERT MAJOR, 10308 METCALF/MAIL SERV INC, 66211 469-0030 1902540608 25 M 1902 54 GS

MAXWELL MD, ROBERT A, 8901 W 74TH STE 10, 66204 362-1660 1902730741 46 M 1902 75 PD	NEIGHBOR MD, ERNEST H, 8612 REINHARDT LANE, 66206 831-3433 1902660751 40 M 1902 67 ORS
MCCAUGHEY MD, HUGH W, 11055 CEDAR STE 217, 66211 491-3724 1902530572 28 M 1902 53 IM	NEIGHBOR MD, GAYLORD P, 5200 HOWE DR, 66205 236-8683 1902410461 13 M 1902 41 00
MCCOWEN MD, HERBERT M, 10100 W 119TH STE 275, 66213 491-1616 1902851221 58 M 1902 FP	NELSON MD, BRYAN C, 9119 W 74TH STE 250, 66204 384-5500 1902752508 50 M 1902 78 PD
MCCUNE MD, MARK A, 10600 QUIVIRA RD STE 430, 66215 541-3230 1902770883 52 M 1902 81 D	NORTON MD, KENNETH A, 8901 W 74TH STE 333, 66204 262-9311 1902752532 50 M 1902 86 IM
MCEACHEN MD, WILLIAM H, 3700 WEST 83RD STE 102, 66208 649-3335 1902590575 32 M 1902 60 PD	NOSTI MD, JUAN C, 8901 W 74TH STE 345, 66204 262-5014 13204630083 38 M 13204 72 PS
MCGRATH MD, BARBARA A, 7509 NALL AVE, 66208 381-5544 4109750889 49 F 4109 86 PS	NOTHNAGEL MD, ARNOLD F, 9936 EDELWEISS CIR, 66203 1902390398 15 M 1902 39 00
MIGLIAZZO MD, CARL V, 7504 ANTIOCH, 66204 341-3100 2803790763 49 M 2803 85 OPH	NYE MD, C ERIK, 7301 MISSION RD STE 348, 66208 362-8317 3520650571 39 M 3520 78 ORS
MILLER MD, FREEMAN LANCE, 10550 QUIVIRA STE 340, 66215 492-1111 1902742316 48 M 1902 77 PD	O'BRYAN MD, JAMES J, 5300 W 94TH TERR, 66207 381-4674 1902730831 47 M 1902 PD
MINGLE MD, RALPH R, 9119 W 74TH STE 150, 66204 362-5510 1902801274 54 M 1902 81 FP	OLSON MD, THOMAS H, 8901 W 74TH STE 10, 66204 362-1660 3005791030 54 M 3005 84 PD
MISKEW MD, DON W, 7301 MISSION STE 348, 66208 362-8317 6506690020 42 M 6506 80 ORS	OWENS MD, DAVID B, 10600 QUIVIRA RD #440, 66215 492-1844 3006760634 50 M 3006 83 OBG
MOFFAT MD, ROBERT E, PO BOX 29194, 66201 469-0094 1902680680 42 M 1902 69 DR	OXLER JR MD, JOHN EDWARD, 8800 W 75TH STE 300, 66204 722-4240 1902720894 46 M 1902 74 IM
MORITZ MD, RICK S, 12316 NIEMAN RD, 66213 371-4343 1902781320 54 M 1902 81 DR	PATTERSON MD, JOHN R, 5317 CHADWICK RD, 66205 1902480362 20 M 1902 48 00
MORONEY MD, JEAN M, 10550 QUIVIRA STE 510, 66215 492-6200 4107650356 25 F 4107 68 N	PAZELL MD, JOHN A, 12210 W 87TH PKWY, 66215 541-0509 2501661247 40 M 2501 73 ORS
MUEHLBERGER MD, JAMES J, 4601 W 109TH STE 314, 66211 491-3242 3006600360 34 M 3006 70 PD	PEARCE MD, EUGENE W J, 9119 W 74TH STE 208, 66204 722-3102 2802490626 24 M 2802 54 OBG
MUELLER MD, J KENT, 3700 W 83RD STE 203, 66208 649-0923 1902620610 35 M 1902 63 P	PEARCE MD, LUNETTA M, 9119 W 74TH STE 208, 66204 362-1525 3005490455 26 F 3005 52 FP
MUNDEN MD, FRANK A, 5300 W 94TH TERR, 66207 381-4674 1902640661 38 M 1902 65 A	PENTECOST MD, RICHARD L, 6620 RIGGS, 66202 1001560626 32 M 1001 65 00
MURPHY MD, JAY W, 8901 W 74TH STE 21, 66204 722-0080 3840733016 49 M 3840 74 CD	PETELIN MD, JOSEPH B, 9119 W 74TH STE 355, 66204 432-5420 1902761043 49 M 1902 81 GPVS
MURRAY MD, W LEE, 10550 QUIVIRA, #270A, 66215 541-3350 1902610614 35 M 1902 78 OPH	PETERSEN MD, GERALD D, 3700 W 83RD STE 104, 66208 648-3911 1902600635 30 M 1902 66 IM
NASH MD, ROBERT A, 11111 NALL STE 200, 66211 491-6686 1902550832 31 M 1902 55 P	PFUETZE MD, BRUCE L, 11725 W 112TH, 66210 469-5579 1902680795 42 M 1902 69 A
NAUER MD, PAULA LOU, 7301 MISSION RD STE 342, 66208 384-0745 1902742324 49 F 1902 78 FP	PHILLIPS MD, WARREN G, 3700 W 83RD STE 203, 66208 649-0923 1902600643 26 M 1902 63 P
NAVICKAS MD, LEONARD A, 9119 W 74TH STE 150, 66204 362-5510 1902771057 53 M 1902 78 FP	PILCHARD MD, WILLIAM A, 8901 W 74TH STE 25, 66204 362-3210 1602650436 39 M 1602 72 OPH
NAZARIO MD, LILIANA E, 10100 W 119TH STE 275, 66213 491-1616 57 F 1902 87 FP	PIPPIN MD, LYNNE K, 17409 W 66TH TERR, 66217 35207720036 48 F 35207 72 AN
NEIBURGER MD, JAMES B, 5520 COLLEGE BLVD #110, 66211 491-3300 1642720518 46 M 1642 75 A	PITTS MD, RONALD L, 8901 W 74TH STE 330, 66204 362-2524 2002620831 35 M 2002 72 0
	PORTO JR MD, ANTHONY F, 10550 QUIVIRA STE 120, 66215 894-9125 3006750604 50 M 3006 85 ENT

POWELL MO,CAROL W, 8216 CHEROKEE CIR, 66206
381-3785 1902510652
25 F 1902 51 P

POWELL MO,KENNETH A, 8216 CHEROKEE CIR, 66206
381-3785 1902530688
25 M 1902 53 IM

PRENOES MO,CARLOS A, 6540 W 95TH, 66212
381-5550 3005791099
50 M 3005 81 FP

PRONKO MO,MICHAEL J, 4121 W 83RD STE 223, 66208
648-7878 1902600660
34 M 1902 61 P

PROUD MO,G ONEIL, 3721 W 87TH, 66206
2802390664
13 M 2802 50 00

QUIGLEY MO,JAMES, 9100 W 74TH PO BOX 2923, 66201
676-2340 2803771165
50 M 2803 84 PATH

QUINN MO,JOHN MICHAEL, 10550 QUIVIRA STE 240, 66215
492-3443 2846810512
57 M 2846 87 PS

REEO JR MO,WILLIAM O, 8901 W 74TH STE 225, 66204
831-2604 2803771131
50 M 2803 83 ORS

REIVICH MD,RONALO S, 8016 STATE LINE STE 102, 66208
383-3050 3806600601
34 M 3806 66 P

RICE MD,BERNARD F, 8901 W 74TH STE 125, 66204
262-9222 4113560989
31 M 4113 79 ENO

RICHAROSON II D O,LESTER E, 9100 W 74TH, 66201
676-2214 3875830201
53 M 3875 90 EM

RICHAROSON MO,JAY L, 10550 QUIVIRA RD, 66215
492-6200 1902650748
38 M 1902 66 GS

RICHTER MO,JOHN G, 9100 W 74TH PO BOX 2923, 66201
676-2679 1902761116
50 M 1902 79 AN

RICK JR MO,GREGORY G, 8901 W 74TH STE 372, 66204
831-9300 1902660867
40 M 1902 67 GE

RIEKHOF MO,PAUL L, 10600 QUIVIRA STE 320, 66215
541-3200 2803650627
40 M 2803 00 OBG

RIFFEL MO,LAWRENCE D, 10600 QUIVIRA STE 210, 66215
541-3340 1902781567
53 M 1902 81 IM

ROBERTSON MO,EDWARD J, 9100 W 74TH PO BOX 2923, 66201
676-2479 1902761124
46 M 1902 78 AN

ROBINSON MD,DAVID W, 7930 BRISTOL CT, 66208
4101380985
14 M 4101 40 00

ROBINSON MO,JOHN D, 9100 W 74TH PO BOX 2923, 66201
676-2479 1902741743
48 M 1902 75 AN

ROMITO MO,CYNTHIA L, 10550 QUIVIRA STE 510, 66215
492-6200 1902730181
47 F 1902 74 A

ROSENBERG MO,STANTON L, 1900 W 75TH STE 200, 66208
362-8080 1902550972
30 M 1902 55 P

ROSENTHAL MO, RICHARD H, 10500 QUIVIRA, 66215
492-1000
50 M 1902 78 IM

RUBIN MO,HERBERT M, 10550 QUIVIRA STE 340, 66215
492-1111 2803630511
37 M 2803 72 PO

RUHLEN MO, THOMAS F, 215 W 151ST, 66061
791-4362
51 M 1902 PATH

RYAN MO,MICHAEL E, 8800 W 75 #100, 66204
384-4200 1902720975
46 M 1902 73 N

RYMER MO,ROBERT A, 8901 W 74TH STE 373, 66204
722-0170 702680581
41 M 702 80 OPH

SAFFO MO,KARL S, 8901 W 74TH STE 176, 66204
362-9585 52801620132
39 M 52801 73 PS

SATHYANARAYANA MO,SARASWATHI, 8901 W 74TH STE 20, 66204
677-2281 49509670144
45 F 76 00 OBG

SAVKAR MO,LAXMI OAS A, 8901 W 74TH #312, 66204
384-4844 49523660046
36 M 49523 74 ON

SAXER MO,JOHN J, 12902 STATE LINE, 66209
451-4443 1643850997
59 M 1643 87 FP

SCHAEFER MO,JOSEPH PETER, 10550 QUIVIRA STE 230, 66215
492-7440 1902600724
34 M 1902 61 IM

SCHLICHTER MD,KIMBERLY A, 9119 W 74TH STE 268, 66204
831-2334 2834821331
56 F 1902 87 OBG

SCHREPFFER MD,ROSEMARY, 6401 ENSLEY LN, 66208
556-3000 1902470553
22 F 1902 47 OBG

SCHROLL MD,JOHN T, 8901 W 74TH STE 248, 66204
384-4990 1902761213
51 M 1902 77 OBG

SCLAR MO,WILLIAM C, 10600 QUIVIRA STE 400, 66215
491-3240 2501721720
46 M 2501 79 GS

SETTLE JR MO,RUSSELL O, 8717 W 110TH STE 350, 66210
451-0430 1902600767
35 M 1902 61 P

SHAAO MD,DOROTHY J, 2322 W 51ST, 66205
1902441341
09 F 1902 44 00

SHAFFER MO,KATHLEEN BRAY, 9119 W 74TH STE 250, 66204
384-5500 2846790031
54 F 2846 82 PD

SHARMA MO,S A, 12435 LAMAR AVE, 66209
492-6200 49530680079
44 F 49530 84 PD

SHERIOAN MO,RANDY M, 8901 W 74TH STE 36, 66204
236-6455 1902781681
53 M 1902 81 OBG

SHOFSTALL MD,WILLIAM H, 6701 WEST 56TH, 66202
3901410452
11 M 3901 51 00

SHORT MD,BRUCE HERSCHEL, 10600 QUIVIRA RD STE 210, 66215
541-3340 1902771341
51 M 1902 88 IM

SIFERS MO,TIMOTHY M, 8901 W 74TH STE 356, 66204
677-2508 1902741760
48 M 1902 75 GS

SILVER MO,BRAD J, 8800 W 75TH STE 101, 66204
362-2035 1205760811
50 M 1205 77 IM

SIMON MD,STEVEN M, 5701 W 110TH, 66211
491-2400 30501830310
47 M 30501 84 PM

SIMONE MD,JOSEPH N, 8901 W 74TH STE 25, 66204
362-3210 1902831670
49 M 1902 87 OPH

SINCLAIR MO,RICHARD H, 10600 QUIVIRA RD STE 320, 66215
541-3200
37 M 2834 75 OBG

SMITH MD,DONALD J, 8600 W 95TH, 66212 642-4515 1902490635 18 M 1902 49 FP	VALK MD,WILLIAM L, 5401 W 81ST, 66208 2501370790 09 M 2501 46 00
SMITH MD,MONT A, 9359 W 75TH, 66204 341-0120 3901741157 48 M 3901 86 TS	VANNAMAN MO,DONALO O, 10600 QUIVIRA STE 330, 66215 541-3300 1902711135 43 M 1902 72 PO
SMITH MD,WILLIAM P, 11880 COLLEGE BLVD STE 410, 66201 469-8998 1902771405 51 M 1902 79 R	VOONICK MD,OAVIO S, 9100 W 74TH ST PO 80X 2923, 66201 676-2214 1902801584 50 M 1902 90 EM
SNODELL MO,FIRMIN E, 5555 W 58TH, 66202 432-2080 1902610754 31 M 1902 62 IM	WALO MD,JEFFREY A, 4601 W 109TH #318, 66211 491-5501 54 M 2803 89 A
SNOW JR MD,ARTHUR D, 9119 W 74TH STE 150, 66204 362-5510 1902752800 45 M 1902 76 FP	WALKER MO,JACK O, 10107 HAROY DR, 66212 1902530912 22 M 1902 53 00
STEINZEIG MO,SHERMAN M, 4407 W 71ST, 66208 1902520640 25 M 1902 52 00	WANG MO,SIDNEY W, 10550 QUIVIRA STE 130, 66215 492-1500 38503570049 32 M 38503 70 FP
STEVENSON MO,E KENT, 4121 W 83RD STE 150, 66208 649-5566 2802670675 45 M 2802 74 P	WARNER MO,RICHARD O, 10550 QUIVIRA STE 480, 66215 541-9328 1902721203 45 M 1902 85 P
STRICKLAND MD, JOHN T, 8901 W 74TH, #32U, 66204 831-1003 58 M 2803 89 U	WAXMAN MO,OAVIO, 12516 W 85TH TERR, 66215 588-1227 3515500358 18 M 3515 70 IM
STRIEBINGER MO,CHARLES M, 9119 W 74TH #303, 66204 432-1100 1606711197 45 M 1606 77 NS	WE88 MO,JAMES R, 5949 NIEMAN RD, 66203 631-0900 1902610851 34 M 1902 62 FP
STUBER MO,JACK L, 11880 COLLEGE #410 PO 80X29194, 66201 676-2310 1902661006 40 M 1902 67 OR	WEINGART MO,JAMES H, 8600 W 95TH STE 102, 66212 648-5600 1902841926 58 M 1902 87 FP
STUCKEY MO,CHARLES E, 10600 QUIVIRA STE 350, 66215 541-3377 3005680815 41 M 3005 80 GS	WHITEHEAD MO,RICHARD E, 7301 MISSION RD SUITE 348, 66208 362-8317 2501581618 31 M 2501 65 ORS
SUGAR MO,ROBERT L, 8901 W 74TH STE 248, 66204 384-4990 3508661401 40 M 3508 72 OBG	WHITFIELD MO,STEVEN S, 8901 W 74TH STE 21, 66204 722-0080 56 M 1902 CO
SULLIVAN JR MO,HENRY B, 5817 NIEMAN RD, 66203 631-6160 1902520666 24 M 1902 52 FP	WHITLEY MO,DOUGLAS M, 4601 W 109TH SUITE 202, 66211 491-3376 1902600953 34 M 1902 61 O
SULLIVAN MD,TOM G, 10600 QUIVIRA STE 320, 66215 541-3200 1902711101 44 M 1902 75 OBG	WIGGINTON O.O., GERALD O, 9119 W 74TH STE 250, 66204 384-5500 2878700051 44 M 2878 73 PO
SUTTON JR MO,RICHARD L, 3203 W 83RD, 66206 2501291172 08 M 2501 38 00	WILEY MD,JOHN H, 9119 W 74TH STE 268, 66204 831-2334 4113631151 37 M 4113 70 OBG
TAYLOR MO,THOMAS F, 13347 W 105TH C/O ONL HALSEL, 66215 1902530858 26 M 1902 53 00	WILLIAMS MD,THOMAS A, 10550 QUIVIRA STE 220, 66215 894-4111 1902620920 36 M 1902 63 FP
TAYLOR MD,THOMAS L, 8901 W 74TH STE 34, 66204 362-9444 1902661031 40 M 1902 67 GS	WILSON MO,ROBERT B, 6117 W 119TH APT 3318, 66209 1902400601 10 M 1902 40 00
TENNY MO,ROBERT T, 9119 W 74TH STE 303, 66204 432-1100 1902761361 51 M 1902 81 NS	WILSON MD,SLOAN J, 5618 W 62ND, 66202 1902360618 10 M 1902 36 00
THOMAS MD,MARTY H, 10600 QUIVIRA STE 320, 66215 541-3200 1902790931 51 F 1902 B4 OBG	WOOD MD,FREO M, 8901 W 74TH STE 225, 66204 831-2604 4706620589 38 M 4706 80 ORS
THOMPSON MD,MICHAEL F, 10550 QUIVIRA, 66215 541-0577 3005791323 53 M 3005 89 GE	WURSTER MO,G. RICHARD, 3700 W 83RD STE 203, 66208 649-0923 1902610908 35 M 1902 62 P
THOMSEN MO,GARY, 9119 W 74TH STE 150, 66204 362-5510 3005762722 51 M 3005 77 FP	YE MD,RICHARD C, 7301 MISSION RD STE 317, 66208 362-7505 24222470036 20 M 24222 55 PS
TOALSON MO,WILLIAM B, 8901 W 74TH STE 21, 66204 722-0080 1902630836 37 M 1902 64 CD	YEOMANS MO,RONALD N, 4401 W 109TH, 66211 345-1400 1902670986 40 M 1902 68 OBG
TRETBAR MO,LAWRENCE L, 8901 W 74TH STE 300, 66204 677-1776 1902600881 33 M 1902 67 GS	YOHE MD,RUTH M, 8600 W 95TH, 66212 383-3377 4107540437 26 F 4107 59 PDA
TUCKER MD,SHERIOAN G, 5520 COLLEGE BLVD #320, 66211 451-2227 1902752940 50 M 1902 77 CHP	YOUNG MO,JOHN W, 9119 W 74 #306, 66204 3B3-1550 4706630401 37 M 4706 72 PS

YUT JR MD, JOSEPH P, PD BOX 29194, 66201
676-2310 1602831058
57 M 1602 85 DR

ZACK MD, ASHLEY S, 4601 WEST 109TH STE 122, 66211
491-4045 2803731031
46 M 2803 74 PO

ZAMIEROWSKI MD, DAVID S, 8800 W 75TH STE 340, 66204
831-4113 2307680958
42 M 2307 78 PS

ZEILER MD, STEVEN B, 225 W 151ST, 66061
782-8300
57 M 1103 83 IM

SMITH CENTER — 913 **(Central Kansas Medical Society)**

BARNES MD, JOE L, 119 E PARLIAMENT, 66967
282-6834 1902820082
54 M 1902 89 FP

CONANT MD, FERRILL R, 119 E PARLIAMENT, 66967
282-6834 1902860343
56 M 1902

SHEPPARD MD, ROBERT G, 400 W COURT, 66967
1902450625
21 M 1902 45 00

SOUTH HAVEN — 316 **(Cowley County Medical Society)**

UBELAKER MD, ERNEST J, , 67140
892-2261 1902380597
11 M 1902 38 FP

ST. FRANCIS — 913 **(Northwest Kansas Medical Society)**

ALTER MD, BRUCE R, 221 W FIRST, 67756
332-2133 64927820020
43 M 3607 FP

CRAM MD, ERNEST R, PO BOX 625, 67756
332-2126 1902520178
24 M 1902 52 FP

STEPHENSON MD, LUCILLE C, BOX 824, 67756
1902320438
D6 F 1902 32 00

ST. MARYS — 913 **(Pottawatomie County Medical Society)**

BROWN MD, FRED E, 602 W PALMER, 66536
1902550166
26 M 1902 55 00

STAFFORD — 316 **(Ninnescah Medical Society)**

BROWN MD, C EVERETT, PD BOX E, 67578
1902470103
10 M 1902 47 00

FARMER III O.O., F J, PO BOX 309, 67578
234-6826 2878790688
52 M 2878 80 FP

QUIJANO JR MD, RAMON S, 412 E GRAND, 67578
234-5236 74811710559
45 M 74811 83 GP

STERLING — 316 **(Rice County Medical Society)**

OYSART MD, JACK C, 224 N FOURTH, 67579
1601390201
12 M 3901 41 00

SIMPSON MD, TOM C, 239 N 8ROADWAY, 67579
278-2123 1902731071
47 M 1902 74 FP

STILLWELL — 913 **(Johnson County Medical Society)**

ARMBRUSTER MD, ALBERT A, 354D W 199, 66085
512550045
17 M 512 58 00

STOCKTON — 913 **(Central Kansas Medical Society)**

MAUCK MD, HAROLD C, 623 SOUTH 2ND, 67669
425-6280 1902540616
20 M 1902 54 FP

VOTAPKA MD, WILLIAM L, 623 S SECOND, 67669
425-6280 1902530904
24 M 1902 53 FP

SYRACUSE — 316 **(Southwest Kansas Medical Society)**

PARKS MD, DOUGLAS S, PO BOX 1131, 67878
384-5731
56 M 1902 84 FP

PETTERSON MD, CECIL E, PROFESSIONAL ASSN BOX 1045, 67878
384-5731 1902390436
14 M 1902 39 FP

TONGANOXIE — 913 **(Douglas County Medical Society)**

STEVENS MD, PHILIP L, BDX 319, 66086
845-2090 1902540918
27 M 1902 54 FP

TOPEKA — 913 **(Shawnee County Medical Society)**

ALLEN MD, TIMOTHY E, 823 MULVANE, 66606
234-3451 1902761817
49 M 1902 79 R

ARJUNAN MD, K N, 634 SW MULVANE ST #202, 66606
232-3555 49514700051
44 M 49568 83 NS

ARTZER MD, DENNIS C, 9D1 GARFIELD, 66606
354-9591
51 M 1902 NEP

ARUNAKUL MD, PUNYA, 1710 W TENTH, 66604
234-2624 89102690622
44 M 89104 80 OT0

ASHLEY JR MD, B JOHN, 1616 WEST 8TH ST, 66606
233-2280 1902560048
31 M 1902 56 OPH

ASHLEY MD, BYRDN J, 3222 PLASS, 66611
1902240D19
98 M 19D2 24 OPH

ASHLEY MO,THOMAS J, 1616 W 8TH, 66606
233-2280 1902840083
58 M 1902 88 OPH

ATWOOD MO,MICHAEL O., 631 HORNE STE 340, 66606
232-9394 1902820040
56 M 1902 84 FP

AVERILL MO,STUART C, MENNINGER FO BOX 829, 66601
273-7500 502520041
24 M 502 58 P

BAEHR MO,RALPH H, 7505 ROBINHOOD CT, 66614
1606590047
35 M 1606 65 00

BAIR MO,GLENN O, 2300 SW 29TH #123, 66611
267-3025 2401570066
31 M 2401 59 IM

BAKER MO,PHILLIP L, 909 MULVANE, 66606
357-0301 3005630061
37 M 3005 63 ORS

BAKER MO,RAY O, 4430 MARLBORO RD, 66610
4812550051
30 M 4812 67 00

BARABAN MO,MARC R, 823 MULVANE STE 200, 66606
357-5325 2846750030
50 M 2846 80 PS

BARNETT MO,ROBERT E, 823 MULVANE STE 280, 66606
235-0202 2802820031
00 M 2802 84 08G

BARRY MO,DAVIO R, 2200 GAGE BLVD, 66622
272-3111 1902680060
42 M 1902 72 FP

BASSETT MO,PAUL M, 1500 SW 10TH, 66604
354-6100 1902770077
52 M 1902 80 EM

BAUM MO,CURTIS A, 823 MULVANE, 66606
345-9591 1902830193
57 M 1902 84 IM

BEALE MO,DAVIO A, MENNINGER BOX 829, 66601
273-7500 5404560028
31 M 5404 64 P

BEARO MO,MELISSA J, 904 MULVANE, 66606
232-8224 1902860114
60 M 1902 89 PO

BECK MO,JOSEPH O, 2760 SW BURLINGAME RD, 66611
3005430118
18 M 3005 47 00

BEOFORO MO,O R, PO BOX 1772, 66615
4802400140
09 M 4802 46 00

BEELMAN MO,FLOYD C, 1286 LAKESIDE DR, 66604
3840350079
02 M 3840 36 FP

BELLER MO,WILLIS L, 68 SW PEPPER TREE LN, 66611
1902410046
14 M 1902 41 00

BELLOWS-8LAKELY MO,DAVIO S, BOX 829, 66601
273-7500 1902770123
51 M 1902 P

BLEIBERG MO,EFRAIN, PO BOX 829, 66601
273-7500 64902760057
51 M 64930 78 P

BOLT MO,MICHAEL, 631 HORNE STE 400, 66606
354-9504 1902760161
51 M 1902 77 GS

BONEBRAKE MO,C RICHARD, 634 MULVANE STE 104, 66606
295-5330 1606750184
48 M 1606 79 08G

BOREL MO,DAVIO, 1700 W 7TH PATH DEPT, 66606
295-8473 1902710104
45 M 1902 72 PATH

BOWEN JR MO,HARRY J, 1900 SW PEMBROOK LN, 66604
1902370087
11 M 1902 37 00

BOWEN MO,CLOVIS W, 2200 WEST 10TH, 66604
234-8601 1902370079
12 M 1902 37 FP

BOWEN MO,JUOITH M, MENNINGER BOX 829, 66601
273-7500 4720820035
55 F 4720 84 P

BOYER MO,OE80RAH A, 634 SW MULVANE STE 307, 66606
232-6633 3006830101
58 F 3006 89 AN

BRAHMAN MO,HERBERT O, 1700 SEVENTH, 66606
295-8471 512700039
43 M 512 79 PATH

BRAUN MO,ROBERT W, 823 MULVANE 4TH FL, 66606
354-9591 2803700063
44 M 2803 76 IM

BRIOWELL MO,RUSSELL E, 4715 W CEOAR CREST, 66604
1902510075
26 M 1902 51 00

BROOSKY MO,TRINA A, 634 MULVANE STE 104, 66606
295-5330 1401840415
53 F 1401 08G

BRUNER JR MO,KENNETH W, 1125 GAGE STE B, 66604
271-6164 2401701373
44 M 2401 74 PATH

CACHIA MO,RICHARD M, 1700 W 7TH PATH DEPT, 66606
295-8472 62701730017
51 M 62701 78 PATH

CASHMAN JR MO,MAURICE R, 823 MULVANE STE 400, 66606
354-9591 1902610151
35 M 1902 66 HEM

CHALLA MO,SHEKHAR K, 2200 SW 6TH #104, 66606
354-8518
56 M 49521 87 GE

CHEN MO,CHU-CHI, CTRL UROLOGY 1710 W 10TH #200, 66604
354-4465 24405730037
47 M 24405 81 U

CHEN MO,TAK-MING, 823 SW MULVANE #230, 66606
234-3451 24405680161
41 M 24402 76 AN

CHERRY JR MO,ARTHUR C, 1125 SW GAGE, 66604
273-9813 3806530114
27 M 3806 58 PO

CLARK MO,CRAIG N, 300 SE NORWOOD, 66607
1902580197
29 M 1902 58 00

COCHRAN MO,PAUL W, MENNINGER BOX 829, 66601
273-7500 4802580229
33 M 4802 76 IM

COHEN MO,LOUIS, 823 MULVANE, 66606
233-7175 1902410101
14 M 1902 41 IM

COKELEY MO,JOHN M, 2200 GAGE, 66622
272-3111 5104550209
30 M 5104 66 P

COKER MO,W LAURENCE, 631 HORNE #340, 66606
232-9394 1902780366
53 M 1902 81 FP

COLLINS MO,DEAN T, MENNINGER FO BOX 829, 66601
273-7500 1902550239
28 M 1902 55 P

COLLINS MO,EDWARD JOSEPH, 900 WASHBURN, 66606
233-3242 1611710344
45 M 1611 77 OPH

CONOVER MO,MARGARET A, 634 MULVANE #307, 66606
232-6633 3006840191
58 F 3006 89 AN

CONROW MO,JEFFREY K, 823 MULVANE, 66606
354-9591
52 M 1902 IM

CONROY MO,ROBERT W, MENNINGER FO BOX 829, 66601
273-7500 2604640281
38 M 2604 71 P

CDDLEY MD,DENNIS M, 1125 SW GAGE 8, 66604

273-9813 19D277D336
51 M 19D2 79 PD

CODN MD,STEPHEN D, 1 MED PK W 8LDG 823 MULVANE, 666D6

234-3451 19D283D479
56 M 19D2 85 RO

CDPPLE JR MD,HAL E, 904 SW MULVANE, 666D6

232-8224 3DD578D232
46 M 3DD5 84 PNP

CDTTDN MD,RDBERT T, 7520 DXFDRDshire RD, 66614

19D245D161
19 M 19D2 45 DD

CRARY MD,JDHN E, 1001 GARFIELD STE 201, 66604

233-42D2 19D243D25D
18 M 19D2 43 IM

CRDUCH MD,STEVEN W, 9D4 MULVANE, 666D6

232-8224 19D276D365
51 M 19D2 77 PD

CRDUCH MD,WILLIAM H, 67DD SW AYLESBURY RD, 6661D

28D245D217
2D M 28D2 51 DO

CURTIS MD,JEFFERY L, 9D1 GARFIELD, 666D6

354-9591 19D281D192
55 M 19D2 82 IM

DAMMDN JR MD,JAMES W, 833 GARFIELD, 66606

233-1690 481282D422
56 M 4812 89 CDTs

DATTILD MD,RAYMDND, 634 MULVANE STE 203, 666D6

233-9343 55D028D11D
55 M 55D02 88 CD

DAUGHETY MD,TED W, 9D1 GARFIELD, 666D6

354-9591 481274D267
49 M 4812 86 IM

OAVIS MO,CHESTER R, 631 HORNE STE 130, 66606

232-6020 19D2751889
50 M 19D2 76 FP

DELGADO MO,SERGIO, 634 MULVANE STE 200, 66606

357-0352 250162D389
37 M 2501 74 DRS

DELGADO MO,SERGIO VICTOR, MENNINGER 8DX 829, 66601

273-7500 64902810011
57 M 649D2 82 P

DONEPUDI MO,RAO S, 634 MULVANE STE 307, 66606

232-6633 49550740132
49 M 4955D 82 AN

DUNAGIN MD,JACK A, 1530 STRATFPRD RO, 66604

19D244D433
20 M 19D2 44 00

DUNIVEN MD,PHILIP L, 1 MED PK W 8LDG 823 MULVANE, 666D6

234-3451 481277D425
52 M 4812 81 R

DURST JR MD,ROBERT D, 1706 SW TENTH, 666D4

357-5166 280369D98D
42 M 2803 72 D

EATON MD,EDWARD L, 823 MULVANE STE 275, 66606

233-7138 4D1721134
40 M 401 73 P

EOOS MD,8RECK A, 823 MULVANE STE 28D, 66604

235-0202 19D284D547
56 M 19D2 88 OBG

ELDER MD,D MIKEL, 1 MEQ PK W 8LDG 823 MULVANE, 666D6

234-3451 19D269D294
41 M 19D2 73 DR

FABACHER MD,JEFFREY E, P O 8DX 829, 66601

273-75D0 210579D484
53 M 2105 83 P

FAIRCHILD MO,RICHARD S, 901 GARFIELD, 66606

354-9591
48 M 19D2 END

FEAGAN MD,JERRY, 22D0 SW 6TH, 666D6

233-3555 19D263D216
39 M 19D2 64 GE

FEIFAREK MD,MICHAEL J, 9DD SW WASHBURN, 666D6

235-3322 56D582D338
50 M 56D5 DPH

FERNANDEZ MD,LUIS A, 27D7 WEST 13TH, 666D4

27501410751
14 M 275D1 68 DO

FIELD MD,RICHARD A, 823 SW MULVANE #23D, 666D6

235-3451 19D255D387
29 M 19D2 55 AN

FIELD-KRESIE MD,DEBBIE A, 8TH & LINC DLN, 666D6

233-51D1 19D285D488
59 F 19D2 88 DBG

FITZGERALD MD,DAVID A, 9D1 GARFIELD, 666D6

357-6171 12D57DD141
41 M 12D5 88 N

FDSTER MD,D BERNARD, 9DD SW 31ST STE 316, 66611

25D138D264
14 M 25D1 47 OD

FRANKLIN JR MD,BENJAMIN A, 1 MED PK W BLDG 823 MULVANE, 66606

234-3451 19D276D497
45 M 19D2 77 R

FRUEND MD,WILLIAM L, 9D1 GARFIELD, 666D6

354-9591
54 M 19D2 CD

GABBARD MD,GLEN D, PD BDX 829, 666D1

273-75D0 16D175D95D
49 M 16D1 76 P

GANDHI MD,SHANTIKUMAR K, 833 GARFIELD, 666D6

233-169D 495D165D25D
4D M 495D1 78 TS

GANZARAIN MD,RAMDN C, 2521 SW CDLLEGE, 66611

354-8D07 23101470075
23 M 231D1 73 P

GARONER MO,J DOUGLAS, 901 GARFIELO, 66606

354-9591
51 M 19D2 78 RHU

GAY MD,JOHN D, 1 MED PK W BLOG 823 MULVANE, 66606

234-3451 480268D452
42 M 4802 74 DR

GEIS MD,DICK A, 9D1 GARFIELD, 66606

354-9591
47 M 19D2 84 OM

GEIST MD,MICHAEL J, 9544 SW 45 ST, 66610

478-4344 19D285D858
58 M 19D2 GP

GENDEL MD,JOSEPH E, PO BOX 4127, 666D4

235-9914 480437D205
12 M 4804 52 ORS

GIESSEL MO,MICHAEL O, 823 MULVANE 4TH FL, 666D6

354-9591 19D274D364
48 M 19D2 74 D

GIMPLE MD,KENNETH, 631 HORNE STE 200, 66606

233-7491 19D271D406
45 M 19D2 78 ORS

GLEASON MD,JIMMIE A, 800 LINCOLN, 66606

233-51D1 19D258D332
33 M 19D2 60 OBG

GRAY MD,DAVID E, 1208 SW 29 TER #A-5, 66611

160642D0516
16 M 1606 42 00

GRAYIB MD,ANTOINE S, 1625 DAKLEY, 66604

60501460055
18 M 605D1 58 00

GREENBERG MD,MARK, 1 MED PK W BLDG 823 MULVANE, 66606

234-3451 161172D633
46 M 1611 76 R

GREENE MD,HDRACE T, 156 SW FAIRLAWN RD, 666D6

40142D258
15 M 401 47 00

GREENE MD,RUSSELL E, 1 MEO PK W BLOG 823 MULVANE, 66606
 234-3451 515790187
 53 M 515 83 RT
 GREER MO,RICHARD H, 1207 W 29TH A-7, 66611
 190239D193
 09 M 1902 39 00
 GUTOVITZ MO,ALLEN LOUIS, 634 MULVANE STE 100, 66606
 233-9643 1611720668
 46 M 1611 79 CO
 HACKER MD,ELAINE MARY, 3026 QUAIL CREEK, 66614
 296-3981 2604500250
 25 F 2604 78 OBG
 HALL MO,ROY P, 634 MULVANE STE 402, 66606
 295-5310 5107850432
 59 M 5107 88 FP
 HALLEY MD,M MARTIN, 901 GARFIELD, 66606
 233-171D 2401530579
 27 M 2401 59 TS
 HAMILTON JR MO,JAMES J, 823 MULVANE STE 22D, 66606
 234-3451 1902810346
 55 M 1902 87 GPPVS
 HANSEN MD,ERIC E, 1504 SW 8TH ST, 66606
 235-6600
 51 M 64935 9D P
 HARRIS MO,HUBERT L, 1001 HORNE STE 210, 666D4
 233-3151 1803390301
 12 M 1803 49 D
 HARRIS MO,PATRICIA A, 1617 W 26TH, 66611
 1902540446
 29 F 19D2 54 00
 HARRISON MD,HALL E, 901 GARFIELD, 66606
 354-9591 2802650313
 39 M 28D2 72 IM
 HARVEY MD,R CLAY, 1 MED PK W 8LDG 823 MULVANE, 666D6
 234-3451 1902780773
 52 M 1902 79 R
 HEBBAR MO,SATYA N, 634 MULVANE STE 100, 66606
 233-9643 49509630240
 39 M 495D9 74 CD
 HEOEGAARD MO,CHERYL K, 634 MULVANE #104, 666D6
 295-5330 30D5830574
 46 F 3005 87 OBG
 HEEB MD,CAMILLE S., 1125 SW GAGE, 66604
 273-9813 1902790841
 44 F 1902 83 PO
 HERRERA MD,JDRGE J, 2825 CALIFORNIA, 66605
 267-5370 64901550814
 27 M 64901 74 IM
 HILL MD,ROBERT N, 901 GARFIELD, 666D6
 354-9591 1902670391
 14 M 1902 68 IM
 HIRSCHBERG MD,J COTTER, MENNINGER BDX 829, 666D1
 273-7500 16024D0103
 15 M 16D2 52 CHP
 HISZCZYNSKYJ MD,ROMAN, 1500 W TENTH, 66604
 354-6031 1803660472
 35 M 18D3 70 PATH
 HOBBS MD,DDNALD D, 2858 PLASS, 66616
 2401540582
 28 M 2401 63 00
 HOHERZ MD,DAVID G, 823 MULVANE #3D0, 66606
 235-1170 18D3720122
 45 M 1803 75 TS
 HOLMES MD,ROBERT W, 6116 8ROOKFIELD CR, 66614
 354-9591 1902770662
 52 M 1902 80 IM
 HOSTETTER MD, M MORGAN, 634 MULVANE #1D4, 66606
 295-5330 1902691215
 46 F 1902 74 DBG
 HOSTETTER MD,JAMES P, 3921 SW CHELMSFORD RD, 66610
 190269057D
 43 M 1902 7D EM

HOYT MO,ARTHUR W, 2521 NW 35TH, 66618
 234-5663 250140D559
 14 M 2501 55 P
 HSU MO,CHENG H, 1516 W SIXTH, 66606
 232-1005 38504660173
 41 M 38502 74 U
 HSU MD,SHIN-FU, 1001 GARFIELD #203, 66604
 232-0362 24402680209
 43 M 24402 OT0
 HUANG MD,JONSON, 901 GARFIELD, 66606
 357-6171 27D177D474
 52 M 2701 81 N
 HUFFMAN MD,DEAN G, 1500 SW 10TH, 66604
 345-5952 3843740498
 47 M 3843 08G
 HUSTON MD,JDSEPH W, 634 MULVANE #200, 66606
 357-D352 1902620393
 35 M 1902 63 DRS
 HUTTON MD,FREOERICK A, 1001 GARFIELD STE 102, 66604
 234-D553 6701580417
 29 M 6701 66 PS
 HYLAND MD,JDSEPH M, MENNINGER 80X 829, 66601
 273-750D 53902680591
 45 M 53902 74 P
 ILIFF MD,R DOUGLAS, 1119 GAGE, 66604
 271-6161 1902742260
 49 M 1902 80 FP
 ILORETA MD,ALFREDD T, 1516 W SIXTH, 66606
 232-1005 74801710429
 47 M 74801 80 U
 ISAACSON MO,RICHARD N, 1001 GARFIELD STE 301, 666D4
 233-4256 250175D975
 48 M 25D1 80 U
 JACKSDN JR MO,DONALD H, 634 MULVANE #1D0, 666D6
 233-9643 3515690424
 40 M 3515 84 CD
 JACDBY II MD,ROBERT E, 631 HORNE STE 34D, 66606
 232-9394 2307720461
 46 M 2307 75 FP
 JANSSEN MD,ERWIN T, MENNINGER 80X 829, 66601
 273-75D0 180362D551
 36 M 1803 70 P
 JENSEN MD,ROBERT D, 1500 W TENTH, 66604
 354-6031 3005790653
 53 M 3005 83 PATH
 JETTE MD,N TIMOTHY, 4150 W 6TH #11D, 66606
 233-5141 80171D336
 46 M 8D1 83 AN
 JDNES MD,CLIFTDN C, 823 MULVANE, 66606
 354-9591
 55 M 1902 ID
 JDSEPH MD,BRIAN W, 823 MULVANE STE 275, 66606
 233-7138 35205610012
 38 M 35205 74 CHP
 JOSS MD,CHARLES S, 14DD STRATFDRD, 66604
 1606400612
 14 M 1606 40 00
 JOYCE MD,G BERNARD, 4929 WEST HILLS DR, 66606
 1902440808
 17 M 1902 44 DRS
 KATZ MD,JERDME.B, 80X 829, 66601
 273-75D0 2101441175
 22 M 2101 52 P
 KAVEL MD,KARL K, 1123 SW GAGE, 66604
 273-9999 3605640248
 36 M 3605 72 POA
 KEARNS MD,NORBERT W, MENNINGER BOX 829, 66601
 273-750D 1002701142
 43 M 1002 72 P
 KELLY MD,DAN A, 904 MULVANE, 666D6
 232-8224 2803640265
 39 M 2803 69 PD

KEYS JR MO,ROBERT C, 823 SW MULVANE #230, 66606
235-3451 1902620431
36 M 1902 64 AN

KIM MO,YONG W, 631 HORNE STE 110, 66606
232-6964 58302490013
28 M 58302 61 IM

KINOLING MD,PAUL H, 901 GARFIELD, 66606
233-1710 3545610417
30 M 3545 68 TS

KIRKEGAARD MD,ROOGER S, 2205 SW ARYONIA PL, 66614
1803560451
30 M 1803 64 00

KLEINHOLZ JR MO,EMIL JOHN, 634 MULVANE #201, 66606
232-1227 3503650320
39 M 3503 79 IM

KLEMMER MO,HERBERT, 904 MULVANE MED PARK CL, 66606
233-5033 4102370517
11 M 4102 56 P

KNAPPENBERGER MO,KURT R, 631 HORNE STE 200, 66606
233-7491 1902800651
54 M 1902 88 ORS

KONIGSBERG JR MO,CHARLES, 900 SW JACKSON RM 1052, 66612
296-1343 4706651425
40 M 4706 88 PH

KOONTZ MD,JUOITH A, BOX 829, 66601
233-5033 1902750823
49 F 1902 81 CHP

KOOSER MO,JUDITH A, 1 MED PK W 8LOG 823 MULVANE, 66606
234-3451 1601B10308
47 F 1601 85 TR

KOSSOY D O,ALLEN F, 9D1 GARFIELD, 66606
354-9591
53 M 2878 A

KOVARIK MD,ERNEST D, 62D SE MADISON STE 154, 66607
233-1800 3005640317
36 M 3005 71 OPH

KOWALSKI MD,STEPHEN F, 1417 SW MACVICAR, 66604
273-7500 3901810876
55 M 3901 83 P

KRESIE MD,RANDALL J, 620 SE MADISON STE 154, 66607
233-1800 1902841055
58 M 1902 88 OPH

KROLL MO,HARRY G, 2912 CEDAR COVE CT, 66614
1602500337
24 M 1602 57 OD

LACCHEO MD,MICHAEL L, 1119 GAGE, 66604
271-6000 3840761192
51 M 3840 82 FP

LAI MD,MAX G, 1710 W 10TH #200, 66604
354-4465 24405720031
45 M 24405 81 U

LANG MD,CLAYTON A, 634 SW MULVANE STE 307, 66606
232-6633 1902650497
39 M 1902 88 AN

LAUNEY MD,WALTON S, 1 MED PK W BLDG B23 MULVANE, 66606
234-3451 4804752094
39 M 4804 81 R

LEE MO,SONG DDW, B23 SW MULVANE #230, 66606
235-3451 24405680137
43 M 38505 74 AN

LEE MD,SONG PING, B23 MULVANE STE 250, 66606
233-6001 38502610462
34 M 38502 74 OTO

LEIFER MO,WILLIAM N, 1500 W TENTH, 66604
354-6031 1902730652
47 M 1902 78 PATH

LENTZ MD,WILLIAM R, 2930 SW WANAMAKER DR STE 5, 66614
272-2332 1902530548
24 M 1902 53 FP

LEPSE MO,PETER S, 909 MULVANE, 66606
357-03D1 1803800932
57 M 1803 DRS

LESSENDOEN JR MO,C M, 5635 NW BRICKYARD RD, 66618
1902430454
18 M 1902 43 D

LEVY MD,EOWIN Z, 4125 SW GAGE L-6 PO 80X 4311, 66604
273-5610 1606540783
29 M 1606 59 P

LIESMANN MO,GEORGE E, B23 MULVANE #300, 66606
235-1170 1902742278
49 M 1902 81 GPVS

LIESMANN MO,JEAN E, 901 GARFIELD, 66606
234-9591
49 F 1902 77 IM

LISTERMAN MD,JOHN C, 8C/BS PO 80X 239, 66629
291-8221 2803741045
42 M 2803 83 FP

LOGAN MO,WILLIAM S, PO 80X 829, 66601
273-7500 4812771596
49 M 4812 84 P

LUI MD,NASON, 1516 W SIXTH, 66606
233-1747 1606770819
48 M 1606 83 GPVS

LYNCH MO,JOHN A, 909 MULVANE, 66606
357-0301 2834550591
30 M 2834 64 ORS

MARPLES MO,8RAOLEY W, 901 GARFIELD, 66606
354-9591 1902831131
56 M 1902 86 IM

MARTIN MO,WILLIAM O, 3643 YORKWAY, 66604
1902440956
19 M 1902 44 00

MARTINAK MO,JOSEPH F, PO BOX 239, 66629
291-8711
39 M 3506 89 FP

MCCARTER MD,DUANE K, 2101 W 10TH, 66604
233-8979 1902580600
26 M 1902 65 IM

MCCARTHY MD,AILEEN C, 901 GARFIELD, 66606
354-9591 1902831173
57 F 1902 IM

MCCOMAS JR MD,MARMADUKE D, 3020 BRUSH CREEK CR, 66614
1902430501
16 M 1902 43 U

MCCOY MO,MICHAEL T, 823 MULVANE #370, 66606
233-0117 1902752389
49 M 1902 80 ORS

MCCLROY MD,ROBERT T, 823 MULVANE STE 220, 66606
232-0444 1902610568
35 M 1902 62 GS

MCKINNEY D.O.,SHARON L, 631 HORNE STE 31D, 66606
354-1299 2878830124
41 F 2878 PM

MEIDINGER MD,RICHARD, 1 MED PK W BLDG 823 MULVANE, 66606
295-8011 1902650594
39 M 1902 66 OR

MENNINGER MD,ROBERT G, MENNINGER FO BOX 829, 66601
232-7214 3545520493
22 M 3545 53 P

MENNINGER MO,ROY W, 80X 829, 66601
273-7500 3520510515
26 M 3520 62 P

MENNINGER MD,W WALTER, MENNINGER FD 80X 829, 66601
273-7500 352057D526
31 M 3520 59 P

MEYER MD,O WARREN, 634 MULVANE #10D, 66606
233-9643 1902742189
49 M 1902 80 CO

MHATRE MD,VIJAY R, 620 SE MADISON PO BOX 1979, 66601
232-4566 49528740111
49 M 49528 84 IM

MILLS JR MD,PHILIP E, 901 GARFIELD, 66606
357-6171 1902640637
36 M 1902 65 N

MISKE MO,STEPHAINE A, 823 MULVANE, 66606
234-3451 3005821001
56 F 3005 83 OR

MOOLIN MO,HERBERT C, MENNINGER FO BOX 829, 66601
273-7500 3005380366
13 M 3005 50 P

MORRIS MO,MERLE O, 2800 MAC VICAR, 66611
1902450455
21 M 1902 45 00

MORRISON MO,MICHAEL R, 800 LINCOLN, 66606
233-5101 1902760985
50 M 1902 78 08G

MUELLER MO,ARNOLO V, 901 GARFIELLO, 66606
354-9591 3005570441
31 M 3005 58 IM

MURPHY MO,MICHAEL, 631 HORNE STE 340, 66606
232-9394
57 M 3005 89 FP

MYERS IV MO,PERCY C, 634 MULVANE STE 307, 66606
232-6633 1902750866
46 M 1902 AN

MYERS MO,JO ANN, MENNINGER BOX 829, 66601
273-7500 1902530602
28 F 1902 53 P

NABOURS MO,RICHARD O, 4228 W 29TH ST TERR, 66614
272-7190 1902541043
27 M 1902 54 FP

NATHAN MO,WILLIAM A, MENNINGER BOX 829, 66601
273-7500 3503720468
48 M 3503 CHP

NICE MO,G WILLIAM, 915 BUCHANAN, 66606
1902460434
22 M 1902 46 00

NORTHWAY MO,DANIEL P, 823 MULVANE STE 275, 66606
233-7138 1102740838
42 M 1102 P

NOVOTNY MO,PETER C, MENNINGER FO BOX 829, 66601
273-7500 15407550029
30 M 15407 63 P

O'CALLAGHAN MO,WILLIAM K, 901 GARFIELLO, 66606
354-9591
45 M 1002 77 IM

O'NEIL MO,ROBERT H, 901 GARFIELLO, 66606
354-9591 1902450544
20 M 1902 45 IM

OSOURN MO,ROBERT L, 1150 OAKLEY, 66604
2802500541
19 M 2802 51 00

OWEN III MO,JAMES W, 1 MEO PK W 8LOG 823 MULVANE, 66606
234-3451 2802790778
54 M 2802 83 DR

PALMBERG MO,KENT E, 901 GARFIELLO, 66606
354-9591
49 M 1902 76 IM

PARMAN MO,ROBERT O, 3020 W 21ST, 66604
1902540705
27 M 1902 54 00

PASCUA MO,PERCIVAL G, BOX 829, 66601
273-7500 74808621537
39 M 74808 80 IM

PATEL MO,VINOO, 620 SW MAOISON STE 301, 66607
272-1410 49531700031
47 M 49531 74 N

PATRICK MD,FREO EDWARD, 904 MULVANE, 66606
232-8224 1902710848
45 M 1902 72 PO

PAYNE MO,ROBERT R, 631 HORNE STE 200, 66606
233-7491 1902550891
29 M 1902 55 ORS

PENZLER MO,CINYO E, 620 SE MAOISON #154, 66607
233-1800 1902850429
59 F 1902 89 OPH

PERQUE II MD,W LANG, 631 HORNE STE 400, 66606
354-9504 1902742197
49 M 1902 81 GS

PETERSON MO,OEAN L, 2825 SW PLASS, 66611
1902540721
24 M 1902 54 00

PETERSON MO,ROBERT L, 1500 W 10TH, 66604
354-6000 1902620679
36 M 1902 63 EM

PETERSON MO,VERNON J, 1 MEO PK W BLOG 823 MULVANE, 66606
234-3451 512680542
42 M 512 73 R

PETRIK MO,EOWIN L, 823 MULVANE 4TH FL, 66606
354-9591 1902640718
35 M 1902 65 IM

PETTERSON MO,OENNIS CRAIG, 1 MEO PK W BLOG 823 MULVANE, 66606
234-3451 1902741981
49 M 1902 76 R

PFUETZE MO,ROBERT E, 1800 WESTWOOD OR, 66604
232-3332 1902350337
09 M 1902 35 08G

PIERCE MO,CHARLES F, 4108 SW EMLANO OR #3, 66606
4101510862
24 M 4101 55 00

PIERCE MO,DONALD R, 1001 HORNE STE 307, 66604
235-2226 5101490329
23 M 5101 50 FP

POLLY MO,RICHARD E, 909 MULVANE, 66606
357-0301 1803680899
42 M 1803 75 ORS

PORTER MO,ROBERT O, 901 GARFIELLO, 66606
354-9591 2802670527
41 M 2802 73 IM

POULTON MO,THOMAS J, 634 MULVANE STE 307, 66606
232-6633 3840751707
50 M 3840 AN

POWELL II MO,BENSON M, 631 HORNE STE 400, 66606
354-9504 1606490743
26 M 1606 55 TS

POWELL MO,WILLIAM R, 2778 SW MACVICAR AVE, 66611
233-8941 1902540756
30 M 1902 54 GS

PRESTON MO,RALPH R, 5025 BRENTWOOD RO, 66606
1902441243
19 M 1902 44 00

PRICE JR MO,LAURANCE W, 1500 WEST 10TH, 66604
354-6031 1902590711
33 M 1902 60 PATH

PROKOP MO,BRAOFORD S, 920 SW WASHBURN, 66606
233-3900 1606570909
32 M 1606 61 OPH

RAINBOW-EARHART MO,KATHRYN A, 2916 KENTUCKY, 66605
4707480446
21 F 4707 63 00

RAJU MO,A S PAOMA, 1710 W 10TH STE 208, 66604
234-3211 49509610052
39 M 49509 81 TS

RAMSAY MO,GRACE A, 800 LINCOLN, 66606
233-5105 1902800871
48 F 1902 81 08G

RAMSEY MO,BARTLETT W, 904 MULVANE, 66606
232-8224 1902500576
25 M 1902 50 PO

RANDALL MO,GOROON R, 1 MEO PK W 8LOG 823 MULVANE, 66606
234-3451 4706781833
50 M 4706 83 R

RANSOELL MO,EOGAR C, 800 LINCOLN, 66606
233-5101 3005660598
41 M 3005 71 08G

RANSOM MD,JAMES H, 1123 SW GAGE, 66604 273-9999 1803620829 36 M 1803 67 A	SCHLOESSER MD,HARVEY L, 1914 WARNER CT, 66604 3901510538 21 M 3901 55 00
RATLIFF II D D,DEAN W, 1500 W 10TH, 66606 354-6100 42 M 2878 EM	SCHLOESSER MD,PATRICIA T, 1914 WARNER CT, 66604 3901490405 24 F 3901 53 00
REINKING MD,VICTOR E, 631 HORNE STE 110, 66606 233-5084 1902520526 26 M 1902 52 IM	SCHLOESSER MD,PETER E, 823 MULVANE, 66606 234-3451 1902831599 58 M 1902 87 DR
REYMONO MD,RALPH O, 1 MEO PK W BLOG 823 MULVANE, 66606 295-80D8 230D1670853 37 M 2301 72 R	SCHMIDT MD,MICHAEL J, 631 HORNE STE 200, 66606 233-7491 1902791597 54 M 1902 84 ORS
RHOAS MO,JAMES P, 419 W 29TH PO BOX 110, 66601 291-7084 3520600671 34 M 3520 67 IM	SCHRAM MD,PETER CHARLES, PO BOX 829, 66601 273-7500 2507690826 39 M 2507 76 P
RHOAS MD,JEFFREY P, 823 MULVANE 4TH FL, 66606 354-9591 1902841519 56 M 1902 85 IM	SEHDEV MD,JOAN, 631 HORNE STE 310, 66606 233-3553 6101630275 40 F 6101 74 FP
RICCI MO,ROBERT LAWLER, 823 MULVANE STE 400, 66606 354-9591 1902752656 50 M 1902 76 IM	SETTLE SR MO,RUSSELL O, 1208 SW 29TH TER APT S25, 66611 1902290300 04 M 1902 29 00
RICKETTS-KINGFISHER MO,DAVIO J, 3312 SW STONE, 66614 354-4740 1902822085 47 M 1902 84 EM	SHAW MD,JOSEPH L, 1DD1 HORNE STE 204, 66604 235-6221 511600481 34 M 511 72 ORS
ROBERTS MO,WARREN E, PO BOX 4047, 66604 272-5797 1902570728 25 M 1902 57 FP	SHEAFOR MO,DOUGLAS, 823 MULVANE STE 275, 66606 233-7138 1902600775 34 M 1902 61 P
ROBINSON MD,DAVIO B, 800 LINCOLN, 66606 233-5101 1902730954 47 M 1902 74 OBG	SHEEHY MD,PATRICK G, 901 GARFIELD, 66606 354-9591 5605801279 54 M 5605 86 CD
RODRIGUEZ MO,ALBERTO, 2700 W 6TH, 66606 296-4347 27501491603 25 M 27501 76 GP	SHELTON MD,STEPHEN E, 823 MULVANE STE 275, 66606 233-7138 702610591 35 M 702 67 P
ROEDER MO,ROBERT E, 901 GARFIELD, 66606 354-9591 1902670846 40 M 1902 68 IM	SHERWOOD JR MD,CLARENCE E, 3226 TIMBERLAKE LN, 66614 272-2928 702530547 22 M 702 62 GS
ROSEN MD,ONALD E, 5800 W 6TH, 66604 273-7500 1902842175 56 M 1902 88 P	SHEU MO,W ERIC, 823 SW MULVANE #230, 66606 235-3451 24350670072 43 M 38505 82 AN
RDSS MO,JACK L, MENNINGER BOX 829, 66601 273-7500 4812560781 32 M 4812 63 P	SIMPSON MO,WILLIAM S, MENNINGER BOX 829, 66601 273-7500 6001480071 24 M 6001 63 P
ROBERT MO,LARRY, 1001 GARFIELD STE 301, 66604 233-4256 30D5660636 38 M 3D05 77 U	SISK MD,PHILLIP B, 1 MEO PK W BLDG 823 MULVANE, 66606 234-3451 1803560869 32 M 1803 64 R
ROY MD,WILLIAM R, 6137 SW 38TH TERRACE, 66610 1606490786 26 M 1606 54 00	SNARR MO,JACK W, 1 MED PK W BLOG 823 MULVANE, 66606 234-3451 6201650311 41 M 6201 77 OR
RUPP MO,RICHARD J, 901 GARFIELD, 66606 354-9591 3841680722 42 M 3841 75 CD	SPANGLER MD,HENRY E, 9D1 GARFIELD, 66606 354-9591 3005 86 IM
SANCHEZ MD,ROGELIO, 1516 W 6TH, 66606 232-1005 649D1610531 31 M 64901 70 U	SPENCER MD,MILLAR C, 1 MEO PK W BLOG 823 MULVANE, 66606 234-3451 1902551073 28 M 1902 55 R
SARGENT MO,JOSEPH D, MENNINGER BDX 829, 66601 273-7500 2501581324 32 M 2501 66 IM	SPENCER MO,WAYNE E, 22D0 SW 6TH, 66606 233-9686 1902640840 38 M 1902 65 GE
SAYLOR MD,EDWARD H, 634 SW MULVANE #41D, 66606 273-9813 1902650799 39 M 1902 66 PO	STEIN MO,JOSEPH M, 9D1 GARFIELD, 66606 357-6171 3519471069 24 M 3519 56 N
SAYLDR MD,LESLIE L, 1945 HIGH, 66604 1606351115 07 M 1606 36 00	STDCK MD,KARL W, 2740 BURLINGAME RD, 66611 2834370975 13 M 2834 44 00
SAYLOR MD,MARK, 171D SW 10TH #208, 66604 234-3211 1902660948 37 M 1902 67 GS	SUFI MD,M ASHRAF, 2200 SW 6TH #1D4, 66606 354-8518 70402680189 43 M 70402 77 GE
SAYLDR MD,STEPHEN, 631 HORNE STE 340, 66606 232-9394 1902731039 47 M 1902 74 FP	SUFI MD,KAISER A, 7210 FOUNTAINDALE, 66614 44 F 70402 77 PATH
SCAMMAN MO,W WIKE, 2115 W 10TH, 66604 232-2322 4705570367 32 M 4705 64 PATH	

SUNOBYE MD,KEVIN R, 9D1 GARFIELD, 66606 354-9591 57 M 1902 89 IM	WALLACE MD,LEO F, 5500 W 24TH, 66614 273-0803 19D2410739 17 M 1902 41 EM
SWOGGER JR MD,GLENN, MENNINGER BOX 829, 666D1 273-7500 38D6600724 35 M 3806 72 P	WALLS MO,WILLIAM J, 1 MED PK W 8LDG 823 MULVANE, 66606 234-3451 2834661121 39 M 2834 72 DR
TAHERNIA MO,CYRUS, 1500 SW 10TH, 666D4 354-5959 51701560446 32 M 517D1 88 PDC	WALZ MD,RDYCE C, 7261 SW FOUNTAINDALE RD, 66614 154076D0042 27 M 15407 62 P
TAKAHASHI MD,TETSURD, PO 80X 829, 66601 273-7500 572036D0145 32 M 57211 75 P	WANLESS MD,KIRK M, 823 MULVANE STE 325, 66606 232-8188 28D3740898 44 M 2803 81 OTO
TARGOWNIK MD,KARL K, 1218 W TENTH, 66604 40710490181 15 M 40710 59 00	WARD MO,HOWARD N, 823 MULVANE 4TH FL, 66606 354-9591 1606621228 37 M 1606 7D HEM
TARNOWER MD,WILLIAM, 2112 CREST OR, 66614 480248D721 21 M 4802 53 00	WARE MD,LUCILE M, MENNINGER BOX 829, 66601 273-7500 3501531102 29 F 3501 66 P
TEETER MO,SCOTT M, 1130 N KANSAS, 66608 233-0022 57 M 1902 IM	WARRICK MO,DAVID ALAN, 620 SE MADISON PO BOX 1979, 66601 232-4566 3843760596 49 M 3843 79 IM
TEMPERO MO,STEPHEN J, 1 MEO PK W 8LDG 823 MULVANE, 666D6 234-3451 1606671012 42 M 1606 72 R	WATKINS MO,STEVEN C, 901 GARFIELD, 66606 354-9591 49 M 1902 76 END
THOMS MD,NORMAN W, 901 GARFIELD, 66606 233-1710 25D1591605 34 M 2501 75 TS	WAUGH MD,CHARLES W, 823 MULVANE #230, 66606 235-3451 1902841900 57 M 1902 AN
THURSTON MD,DAVID E, 631 HORNE STE 200, 66606 233-7491 19D2551138 29 M 1902 55 ORS	WEAVER MD,WALTER O, 900 WASHBURN ST, 66606 233-3636 1902691053 41 M 1902 70 OPH
TIETZE MO,DENNIS D, 634 MULVANE STE 402, 66606 295-5310 19D2781826 50 M 1902 79 FP	WEBER II MO,RALPH H, HMO KS INC PO BOX 110 COST CTR, 6660 291-8832 3005750996 44 M 3005 88 PD
TOZER MD,RICHARD C, 1207 SW 29TH A-1D, 66611 4102451363 19 M 4102 53 00	WEBER MO,DARRELL J, 1620 LAKESIDE OR, 66604 190244157D 15 M 1902 44 00
TRAVIS MD,JOHN W, 15 PEPPERTREE LANE, 66611 1606551262 29 M 1606 61 00	WELSH MD,NANCY JANE, 1920 PEMBROKE LN, 66604 272-3111 3840631329 39 F 3840 84 IM
TREGER MD,NEWMAN V, 17D4 W 10TH, 666D4 354-8761 1902400547 16 M 1902 4D IM	WERNER MO,JAMES P, 823 MULVANE, 66606 234-3451 58 M 1601 88 DR
TSAI MO,CHIA-HSUN, 823 MULVANE #23D, 66606 235-3451 24406730111 47 M 24406 88 AN	WOOD MO,EDWARD R, 901 GARFIELD, 66606 354-9591 49 M 1902 IM
TUTUSKA MO,PETER J, 901 GARFIELD, 66606 233-1710 35D3821205 56 M 3503 89 CDTs	YANG MD,JASON G H, 6033 SW 36TH, 66614 267-8215 2440581DD22 55 M 24405 P
UHR MD,NATHANIEL, MENNINGER FO 80X 829, 66601 273-7500 3519210656 00 M 3519 50 IM	YEH MO,ROBERT M, 823 MULVANE STE 230, 66606 235-3451 24405730061 47 M 24405 82 AN
VAN SICKLE MO,GREGGORY J, 634 MULVANE STE 410, 66606 235-0335 1606751512 49 M 1606 80 PD	YOON MD,C J, 1504 SW 8TH, 66606 35403690385 43 M 58303 89 PM
VANOE GAROE MD,LARRY D, 800 LINCOLN, 66606 233-5101 1803661045 41 M 1803 72 OBG	YORKE JR MD,CRAIG H, 634 SW MULVANE STE 202, 66606 232-3555 24D1741367 48 M 2401 80 NS
VOGEL MO,STANLEY J, 823 MULVANE 4TH FL, 66606 354-9591 28027009D6 44 M 2802 78 ON	YDUNG MD,PAUL E, 823 MULVANE #240, 66606 233-4927 2407751313 42 M 24D7 80 OPH
VOTH MD,ERIC A, 901 GARFIELD, 66606 354-9591 1902810788 55 M 1902 84 IM	YOUNG MO,THEOORE E, 4130 TWILIGHT #123, 66614 2307460745 22 M 2307 51 D0
WALIA MO,JAG S, 2200 W TENTH, 66604 234-86D1 49529730291 5D M 49515 84 FP	ZACHARIAS MD,DAVIO LLOYD, 1500 W TENTH, 66604 354-6D31 1902531005 26 M 1902 53 PATH
WALL MD,TERRY J, 1034 MULVANE APT 13, 66604 295-8D08 1902821925 54 M 1902 86 RO	ZERBE MD,KATHRYN, BOX 829, 66601 273-7500 4113781772 51 F 4113 79 P
WALLACE MD,BRETT E, 9D9 MULVANE, 666D6 357-D3D1 4813801251 55 M 4813 ORS	ZIMMERMAN MO,WILLIAM H, 1551 SW WESTOVER RD, 666D4 30D6520676 20 M 3006 56 00

TOWANDA — 316
(Sedgwick County Medical Society)

NYBERG MD, FREDRIK F, ROUTE 1, 67144
2101460838
22 M 2101 47 00

TRIBUNE — 316
(Southwest Kansas Medical Society)

MOSER MD, ROBERT, PO BOX 658, 67879
376-4251
58 M 1902 FP

WERNER MD, WILLARD F, , 67879
376-4251 1902520755
24 M 1902 52 FP

ULYSSES — 316
(Southwest Kansas Medical Society)

BREWER MD, MARSHALL A, 223 N MAIN, 67880
356-1261 1902460078
19 M 1902 46 FP

DICKERSON MD, ROBERT M, 223 N MAIN, 67880
356-1261 1902640190
34 M 1902

TILLOTSON MD, DON R, 223 N MAIN, 67880
356-1261 1902650942
32 M 1902 66 FP

VALLEY CENTER — 316
(Sedgwick County Medical Society)

DANIELS MD, RDBERT M, BOX 128, 67147
83B-2794 1902540187
24 M 1902 54 FP

MEANS MD, MILA LEE, RR 1 BDX 100, 67147
685-8231 1902821232
56 F 1902 83 FP

WAKEENEY — 913
(Central Kansas Medical Society)

HAMILTON MD, JAMES J, MED CTR 323 RUSSELL, 67672
743-2124 1902550468
30 M 1902 55 FP

LOCKE MD, MARLIN K, 323 RUSSELL, 67672
743-2124 1902831068
56 M 1902 FP

WAMEGO — 913
(Pottawatomie County Medical Society)

BORGENDALE MD, LLEWELLYN V, 507 ELM PD BOX 7, 66547
456-2291 1902600082
29 M 1902 61 FP

BRADEN MD, BILL L, PO BOX 284, 66547
456-2291 1902600091
31 M 1902 61 FP

CLARK MD, LAURENCE A, 507 ELM, 66547
1902420122
12 M 1902 42 DO

WASHINGTON — 913
(Northeast Kansas Medical Society)

HODGSON MD, DAVID K, 107 E THIRD, 66968
325-2259 1902741581
49 M 1902 80 FP

WATHENA — 913
(Northeast Kansas Medical Society)

PETERSON JR MD, EVAN A, 324 ST JOSEPH BOX 98, 66090
989-3122 1803550715
24 M 1803 56 FP

WELLINGTON — 316
(Cowley County Medical Society)

ANDERSON MD, LARRY R, 1323 NORTH A, 67152
326-3301 1902730032
43 M 1902 74 FP

COLE MD, WARD M, 1324 N CHERRY, 67152
1902360073
08 M 1902 36 00

MCCORMICK MD, EUGENE CARL, SECURITY STATE BANK BLDG, 67152
326-3914 1902560722
31 M 1902 56 IM

NALOOZA JR MD, FAUSTINO M, 1323 NORTH A STE A, 67152
326-8171 74801653719
38 M 74801 74 GS

PEDRAZA MD, HERNANDO, PO BOX 476, 67152
326-5026 26404560106
28 M 26404 72 R

WEIGANO MD, JOEL T, 1323 NORTH A, 67152
326-3301 1902701199
43 M 1902 71 FP

WESTMORELAND — 913
(Pottawatomie County Medical Society)

MINGES MD, TIMOTHY J, 208 N 1ST, 66549
457-3311 1902781281
54 M 1902 85 GP

WICHITA — 316
(Sedgwick County Medical Society)

ABAY MD, EUSTAQUID O, 818 N EMPORIA STE 301, 67214
267-580D 7480173057B
49 M 74801 NS

ABBAS MD, DILAWER H, 1515 S CLIFTON STE 36D, 67218
686-2831 70402700091
45 M 70402 77 N

AGUSTIN MD, CONRADO M, 1035 N EMPORIA STE 165, 67214
267-3389 74807620090
38 M 74807 74 OBG

AHLSTRAND MD, RICHARD A, 3243 E MURDOCK STE 104, 67208
685-2711 300567002D
41 M 3005 75 R

ALDDROT MD, NEIL, 1725 E DOUGLAS, 67211
264-8989 64914753943
46 M 64914 83 P

ALFONSD MD, MANUEL, 3311 E MURDOCK, 67208
689-9445 84710660432
37 M 84710 72 AN

ALLEN MO, PHILLIP M, WESLEY MED CTR 550 N HILLSIDE, 67214
688-2838 2401540035
27 M 2401 81 PATH

ALMONTE MD, PRISCILLA C, 1128 S CLIFTON, 67218
681-2108 74801671954
44 F 74801 78 AN

ALMONTE MD, RODOLFO O, 1515 S CLIFTON STE 480, 67218
686-3791 74801644353
39 M 74801 78 OBG

AMMAR MD, ALEX O, 818 N EMPORIA STE 200, 67214
263-0296 5101760059
51 M 5101 81 GPVS

AMSTUTZ MD, SAMUEL W, 655 N WOODLAWN, 67208
684-5158 1601800027
53 M 1601 OPH

ANDERSON MD, DAVID J, 3243 E MURDOCK STE 4D1, 67208
686-7327 1902810893
54 M 1902 84 AN

ANDERSON MD, JAMES D, 3243 E MURDOCK STE 500, 67208
684-0251 1902830045
57 M 1902 84 IM

ARTZ MD, TYRONE D, 1125 N TOPEKA, 67214
267-0362 1803670036
41 M 1803 74 ORS

AUNINS MO, JOHN, 4853 HEMLOCK, 67216
524-6805 4706560110
28 M 4706 58 FP

BACKES MD, DAVID J, 851 N HILLSIDE, 67214
685-1371 1720770110
48 M 1720 83 U

BAJAJ MD, ASHOK K, 3243 E MURDOCK STE 500, 67208
684-0251
58 M 1902 89 CD

BAMMEL MO, BRUCE, 3311 E MURDOCK, 67208
689-9234 2507780116
52 M 2507 82 OBG

BARBA JR MD, ANTONIO P, 1035 N EMPORIA STE 280, 67214
264-2301 74807620341
34 M 74807 76 OBG

BARBA MD, ESTRELLA G, 1035 N EMPORIA STE 280, 67214
264-2301 74802660212
41 F 74802 80 CHP

BARCLAY MD, ANDREW M, 1010 N KANSAS, 67214
261-2622
49 M 80302 88 FP

BARKER MD, BENJAMIN W, 6405 E KELLOGG #23, 67207
1902510041
18 M 1902 51 00

BARKER MO, PATSY, 818 N EMPORIA STE 303, 67214
265-3774 64914754249
49 F 64914 82 PD

BARTAL MD, ELY, 905 N EMPORIA BOX 3298, 67201
262-7598 39607710019
45 M 39607 81 ORS

BARTH III MD, CHARLES W, 551 N HILLSIDE #410, 67214
264-8604 2834810061
56 M 401 89 CO

BASS II MD, ORAL E, 851 N HILLSIDE, 67214
685-1371 2803710026
40 M 2803 76 U

BATES MD, MICHAEL O, 2703 E CENTRAL, 67214
685-6521 3005740109
48 M 3005 75 OBG

BATTISTE MD, CYNTHIA, 1010 N KANSAS, 67214
261-2622 1606730094
00 F PDC

BAUMAN MD, M LEON, 7373 E 29TH N #W409, 67226
1902440107
D1 M 1902 44 DO

BAUMANN MO, PAUL A, 3333 E CENTRAL STE 214, 67208
688-2920 5605570048
32 M 5605 68 R

BEAMER MD, R LARRY, 818 N EMPORIA STE 200, 67214
263-0296 1902790167
52 M GS

BEATTIE MD, MARY A, 222 S RIDGE RD, 67209
945-5400 1902740658
0D F 1902 PD

BEBAK MO, DONALD M, 3311 E MURDOCK, 67208
689-9445 3515580050
32 M 3515 72 AN

BEER MD, JORGE H., 1010 N MINNEAPOLIS, 67214
261-2647 42901780077
54 M 42901 86 P

BECK MD, CHARLES W, 1515 S CLIFTON STE 215, 67218
687-9961 301720360
46 M 301 80 IM

BECKER MD, KARL E, 818 N EMPORIA STE 307, 67214
264-9476 2307690066
43 M 2307 78 AN

BEECH MO, RANDALL R, PO BOX 780515, 67278
54 M 1902 81 GS

BETHEL MD, CHANOLER S, 6611 E CENTRAL, 67206
682-6559 1902590079
34 M 1902 60 IM

BHARATI MO, RALPH, 1010 N KANSAS PSY DEPT, 67214
686-5151 64933820473
45 M 64933 P

BIERMANN MO, HENRY J, 425 E MURDOCK, 67214
265-6287 3006520072
27 M 3006 52 GS

BIGONGIARI MD, LAWRENCE R, 929 N ST FRANCIS, 67214
268-5905 1611690211
44 M 1611 R

BINGAMAN MD, ROBERT W, 7111 E 21ST, 67206
684-2851 3901721130
47 M 3901 73 GS

BINYON MD, KERNIE W, BOX 8125, 67208
684-2819 1902560111
24 M 1902 56 FP

BLACK MO, BRYAN L, 818 N EMPORIA STE 307, 67214
264-9476 1104850096
57 M 1104 88 AN

BLACKMAN MD, JACQUES O, 3311 E MURDOCK, 67208
945-0142 1902760152
51 M 1902 77 FP

BLOOM MO, BARRY THEIL, 550 N HILLSIDE, 67214
688-2360 1902810885
56 M 1902 86 PO

BLOOM MO, RODNEY LAMONT, 406 E CENTRAL, 67202
265-0705 1902790248
54 M 1902 80 IM

BLOXHAM MD, THOMAS J, 3311 E MURDOCK, 67208
689-9215 1803750153
50 M 1803 80 PUD

BLT MD, MICHAEL S, 655 N WOODLAWN, 67208
684-5158 1902832234
55 M 1902 87 OPH

BONO MO, ROGER C, 3243 E MURDOCK STE 500, 67208
684-0251 5606670089
40 M 5606 74 CD

BOUOREAUX MD, VELTIN J, 1325 N COVINGTON CIR, 67212
264-1381 4812640122
37 M 4812 72 R

BOWLES MO, MARK H, 551 N HILLSIDE STE 410 CAROL, 67214
684-3838 401750118
48 M 401 87 CD

BOXBERGER MO, GREGORY R, 551 N HILLSIDE #410, 67214
684-3838 1902780242
52 M 1902 CD

BOYD MD, Z REX, 120 S MAIZE RD #12, 67209
3005520052
26 M 3005 56 00

BRADA MO, DONALD ROBERT, 929 N ST FRANCIS, 67214 268-8680 1902650063 39 M 1902 65 P	BURPEE MD, JAMES F, 851 N HILLSIDE, 67214 685-1371 5605660128 39 M 5605 71 U
BRAOLEY MD, JOHN G, 1131 S CLIFTON, 67218 689-4958 2803770037 51 M 2803 87 FP	BUTH MD, DENNIS K, 551 N HILLSIDE #410, 67214 684-3838 1902720185 45 M 1902 73 IM
BRAKE MO, OAVIO, 3243 E MURDOCK STE 104, 67208 685-2711 702680051 43 M 702 74 R	BUTIN MD, J WALKER, 38 MISSION RD, 67206 1902470111 23 M 1902 47 00
BRAUN III MD, WILLIAM T, 3243 E MURDOCK STE 104, 67208 685-2711 2802610087 37 M 2802 67 R	BUTLER MD, OORIS C, 1515 S CLIFTON #150, 67218 684-2329 1902751684 48 F 1902 76 FP
BRAUN MO, KENNETH, 1431 BLUFFVIEW STE 211, 67218 683-4688 3519720158 47 M 3519 78 OPH	BYRNE MO, JAMES PERRY, 818 N EMPORIA STE 200, 67214 263-0296 2101680196 42 M 2101 79 TS
BRAUN MO, THOMAS G, 2620 E CENTRAL, 67214 686-9797 6001610129 35 M 6001 76 N	CALIENOO JR MO, DANIEL J, 550 N HILLSIDE, 67214 688-2222 1902670064 41 M 1902 73 EM
BRECKBILL MD, OAVIO L, 3333 E CENTRAL #214, 67208 685-1291 1902640050 38 M 1902 65 R	CAMPION MO, MARY K, 1207 SITTING, 67203 689-9246 1902800171 51 F 1902 83 IM
BRINTON MO, E HOLMES, 3311 MURDOCK, 67208 689-9124 2101700154 46 M 2101 77 GS	CANNON MO, MICHAEL W, 818 N EMPORIA #403, 67214 262-4467 1902751722 50 M 1902 82 ON
BRINTON MO, EDWARD S, 5051 W LINCOLN #8A, 67218 1611410260 15 M 1611 46 00	CAPPER MD, STANLEY L, 3311 E MURDOCK, 67208 689-9206 1803670231 37 M 1803 70 D
BROSIOUS MO, FRANK C, 3243 E MURDOCK STE 500, 67208 684-0251 1902490082 25 M 1902 49 IM	CARLILE MO, WILLIAM E, 1431 S BLUFFVIEW STE 117, 67218 685-6466 1902830428 53 M 1902 87 AN
BROWN JR MD, VAL J., 1802 N HYDRAULIC, 67214 265-1461 1902790302 53 M 1902 82 IM	CARLSON MO, TERRY S, 550 N HILLSIDE, 67214 688-2826 3006770117 50 M 3006 79 PATH
BROWN MO, OAVIO J, 425 E MURDOCK, 67214 265-6287 1902710139 45 M 1902 72 GS	CARRO MO, ALBERTO F, 3600 E HARRY, 67203 689-5775 1902790345 53 M 1902 85 EM
BROWN MO, MICHAEL P, 3333 E CENTRAL #504, 67208 683-6766 3005770270 51 M 3007 78 08G	CATE MO, BAIN C, 818 CARRIAGE PKWY, 67208 651-2213 4814850264 59 M 4814 86 FP
BROWN MO, ROBERT L, 1515 S CLIFTON #150, 67218 685-6455 1902490091 21 M 1902 49 FP	CAUBLE MD, WILBUR G, PO BOX 20343, 67208 2834390119 12 M 2834 46 00
BROWN MO, RONALD C, 818 CARRIAGE PKWY, 67208 685-8231 2803730124 47 M 2803 74 FP	CAUGHLIN MD, GERALD MICHAEL, 811 STRATFORD, 67206 686-6835 4812800308 55 M 4812 83 AN
BROWN MO, RONALD L, 1128 S CLIFTON, 67218 681-2108 3901710111 45 M 3901 72 AN	CAWLEY MD, LEO P, 7137 E MAIN, 67214 3901520096 22 M 3901 57 PATH
BROWN MO, VAL J, 1802 N HYDRAULIC, 67214 265-1461 1003470098 24 M 1003 49 FP	CHANEY MD, ERNIE J, 1131 S CLIFTON, 67218 683-8741 1902560200 27 M 1902 56 FP
BROWNING MO, WILLIAM H, 7077 E CENTRAL #17, 67206 1902430161 16 M 1902 43 00	CHANG MD, FREDERIC C, 818 N EMPORIA STE 200, 67214 263-0296 2401590270 35 M 2401 75 GS
BRUNGARDT MD, GERARD S, 1010 N KANSAS, 67214 261-2650 1902830380 57 M 1902 87 IM	CHARD MD, FREDERICK H, 255 S HILLSDALE DR, 67230 5605390082 15 M 5605 48 00
BRYANT MD, R KEVIN, 2501 E CENTRAL, 67214 682-6885 512790861 54 M 512 87 FP	CHENG MD, MEI Y, 2318 E CENTRAL, 67214 262-2415 1902860271 46 F 1902 87 PD
BUECK MD, RALPH W, 3311 E MURDOCK, 67208 689-9396 1803620187 36 M 1803 68 IM	CHERVEN MO, PHILIP L, 3333 E CENTRAL STE 408, 67208 682-0411 2501710311 45 M 2501 77 PD
BUCK JR MD, BEN H, 1208 N CHARLOTTE, 67208 2834430269 17 M 2834 44 00	CHO MD, SECHIN, UKSM - WICHITA, 67214 261-2622 58302710048 47 M 58302 77 PD
BURNEY II MD, WILLIAM W, 1755 N MADISON, 67214 264-8311 1902520127 50 M 4707 80 IM	CHOPRA MD, RAMAN, 3333 E CENTRAL #201, 67208 685-5271 49514740037 52 M 49536 78 PO
BURNEY MD, WILLIAM W, 1755 N MADISON, 67214 264-8311 4707760066 17 M 1902 52 FP	CHRISTMAN JR MD, CARL, 550 N LORRAINE, 67214 685-0559 4802740404 48 M 4802 75 08G

CLAI8ORNE MO,RICHARD A, 3243 MURDOCK STE 500, 67208
684-0251 1902800227
55 M 1902 80 IM

CLARK MD,COURTNEY, 1128 S CLIFTON, 67218
681-2108 1902560242
30 M 1902 56 AN

CLARK MD,ROBERT G, 7015 E CENTRAL, 67208
652-9221 1902780340
53 M 1902 79 PS

CLIFTON MO,H OAVID, 3600 E HARRY, 67218
689-5050 401650199
41 M 401 70 R

CLINE MO,RYRON W, 550 N LORRAINE, 67214
685-0559 4802770354
51 M 4802 78 08G

COATS MO,BARBARA S, 222 S RIOGE RD, 67209
945-0142 1902830444
57 F 1902 84 FP

COFFEY MO,CHARLES R, 3243 E MURDOCK STE 401, 67207
686-7327 1902820350
55 M 1902 AN

COHEN MD,JUSTIN THOMAS, 655 N WOODLAWN, 67208
684-5158 2803740138
47 M 2803 78 OPH

COHLMIA MO,JERRY 8, 818 N EMPORIA STE 310, 67214
263-5891 1902700133
43 M 1902 71 IM

COLEMAN MD,THOMAS J, 155 N CRESTWAY, 67208
3545510153
18 M 3545 54 00

COLLIER MD,HAROLD W, 3914 SWEET 8AY, 67226
683-5008 1902710236
45 M 1902 72 AN

CONCEPCION JR MO,EUGENIO S, 1515 S CLIFTON STE 480, 67218
684-1048 74802640785
39 M 74802 74 CD

CONRROY MO,PETER A, 818 N EMPORIA #101, 67214
263-1574 515690191
42 M 515 76 AN

COOK MO,DONALD RAY, 315 N HILLSIDE STE A, 67214
686-3392 2012710138
42 M 2012 72 FP

COOK MD,G EDWARD, 144 S HILLSIDE, 67211
685-9289 401670181
42 M 401 69 R

COOPER MO,M KENT, 818 N EMPORIA STE 307, 67214
264-9476 1902790426
54 M 1902 80 AN

CORORY JR OO,V RAY, PO 80X 8037, 67208
684-0201
47 M 2878 80 P

COSSMAN MO,F PRICE, 851 N HILLSIDE, 67214
685-1371 1902570124
28 M 1902 57 U

CRANE MO,DAVID O, 929 N ST FRANCIS, 67214
268-5414 2501600230
34 M 2501 73 PATH

CRONIN MO,ONALO J, 618 RUTLAND, 67206
2604400247
16 M 2604 48 OD

CROW MD,ERNEST W, 402 LONGFORD, 67206
1902440395
20 M 1902 44 00

CROWLEY MO,EDWARD X, 5 PARK AVE, 67206
1643400258
14 M 1643 45 00

CUMMINGS MO,RICHARD J, 427 N HILLSIDE, 67214
686-6608 1902570159
32 M 1902 57 OTD

CZAPANSKY-8EILMAN MO,DESIREE, 550 N HILLSIDE, 67214
688-3110 1902860386
59 F 1902 89 PD

DAKHIL MD,SHAKER R, 818 N EMPORIA STE 403, 67214
262-4467 60501750088
50 M 60501 80 IM

DANBY MO,JOHN H, 2335 E LINCOLN, 67211
265-2876 91705560019
29 M 35205 83 FP

DARRAH MO,JOY N, PO 80X 68063, 67208
681-1827 1902741930
49 F 1902 77 R

DAVIDSON,RANDY G, 55D N HILLSIDE, 67208
688-2239
55 M 2846 81 EM

DAVIS MO,PAUL H, 7111 E 21ST, 67206
684-2851 3901720168
47 M 3901 73 FP

DAVIS MO,RONALO 8, 7322 CEDARIOGE CIR, 67226
685-2153 1902720291
46 M 1902 73 FP

DAVISON MO,JOE O, 8200 W CENTRAL #1, 67212
721-4544 3901810370
54 M 3901 84 FP

DAY MO,HOWARD, 818 N EMPORIA STE 310, 67214
263-5891 1902740194
48 M 1902 76 NEP

DE BAKKER MO,JAN B, 1035 N EMPORIA STE 150, 67214
263-4903 5104590201
25 M 5104 66 GS

DE ROISE MO,DOUGLAS, 2020 N WOODLAWN STE 550, 67208
269-4355 3006770192
52 M 3006 89 08G

DE HART MO,ARTHUR DONIVA, 2703 E CENTRAL, 67214
685-1277 4804771951
50 M 4804 78 08G

DEGNER MO,JAMES C, 3600 E HARRY, 67208
689-5050 1902840482
57 M 1902 DR

DEJONG MO,DAVID C, PO 80X 12667, 67279
722-6366 2501590331
33 M 2501 71 PATH

DELMORE MO,JAMES E, 3243 E MURDOCK LEVEL B, 67208
681-0251 4804782431
50 M 4804 80 GYN

DEMOSS MD,ELEANOR P, 3333 E CENTRAL STE 407, 67208
682-5591 74802660361
42 F 74802 77 PO

DOAN MD,TRINAH, 959 N EMPORIA STE 2 8, 67214
267-5580 94101620195
32 M 94101 82 GP

DEBLIN MO,P LAURENCE, 3333 E CENTRAL STE 214, 67208
685-1291 1002730312
40 M 1002 82 R

DOLAN JR MO,PHILIP JARVIS, 3311 E MURDOCK, 67208
689-9241 2105730317
47 M 2105 79 GE

DONATELLE MO,EDWARD P, UKSM - WICHITA 1010 N KANSAS, 67214
261-2607 2604510204
22 M 2604 79 FP

DONNELL MO,JAMES M, 758 S HILLSIDE, 67277
687-4421 1902550298
28 M 1902 55 FP

DOORN80S MD,DANIEL C, 3311 E MURDOCK, 67208
689-9355 1902840512
58 M 1902 IM

DORN MO,CURTIS C, 550 N HILLSIDE, 67214
688-2360
57 M 1902 83 PO

DOORSCH MO,JOHN N, 1131 S CLIFTON, 67218
689-4958 1902790515
54 M 1902 FP

DOUTHIT MD,DOUGLAS DAVIO, 551 N HILLSIDE STE 510, 67214
685-0559 4802790487
53 M 4802 80 08G

DOWNING MO,GREGORY C, 551 N HILLSIOE #410, 67214
 684-3838 1902790531
 52 M 1902 R

DRAKE MO,RALPH L, 4422 E 3RD, 67208
 4102260177
 99 M 4102 37 00

ORAZEK MO,GEORGE, 3311 E MURDOCK, 67208
 689-9316 3506760339
 50 M 3506 81 OPH

ORAZEK MD,JANE K, 3600 E HARRY, 67218
 689-4774 3506760673
 49 F 3506 81 P

DREVETS MO,CURTIS C, 3311 E MURDOCK, 67208
 689-9178 1902560331
 30 M 1902 56 IM

DUICK MD,GREGORY, PO BOX 47669, 67201
 265-1308 1643720325
 46 M 1643 77 CD

DURANO MD,ANTONIO C, 959 N EMPORIA STE 401, 67214
 263-7893 74807560160
 29 M 74807 65 U

OUTTA MD,SAKUNTALA S, 808 N EMPORIA, 67214
 268-5927 49550650249
 42 F 49550 87 R

ECKERT MO,WILLIAM G, 7006 E TENTH, 67206
 685-7612 3519520248
 26 M 3519 67 PATH

EDWARDS MD,MANIS C, 345 N HILLSIDE, 67214
 683-2661 3005580179
 33 M 3005 65 OBG

EGBERT MO,ANNE MARSH, UKSM WICHITA 1010 N KANSAS, 67214
 261-2622 3840791229
 54 F 3840 80 IM

EGELHOF MO,RICHARD H, 222 S RIOGE RD, 67209
 945-0142 1902730334
 45 M 1902 75 FP

EINSPAHR MD,DAVID E, 3243 E MURDOCK, 67208
 681-0736 30055801990
 54 M 3007 87 ON

ENOCH MD,RDILLAND, 315 N HILLSIDE STE B, 67214
 681-0423 64914762101
 49 M 64914 78 FP

ERKEN MO,RONALD V, WICHITA PSY CTR PO BOX 8037, 67208
 684-0201 2834560278
 29 M 2834 62 P

ERNST MD,TARI MAE, 818 CARRIAGE PKWY, 67208
 651-2202 3005810115
 56 F 3005 FP

ESTEP MD,THOMAS H, 818 N EMPORIA STE 200, 67214
 263-0296 6002750161
 51 M 6002 82 CO

EVANS MO,FARRIS D, 521 RUTLAND RD, 67206
 1902320161
 05 M 1902 32 00

EVANS MO,JOHN F, PO BOX 21046, 67208
 688-2360 2803700225
 42 M 2803 71 MFM

EVANS MO,ROGER WILLIAMS, PO BOX 2517, 67201
 263-5889 1902640238
 39 M 1902 65 CO

EYSTER MD,ROBERT L, 3243 E MURDOCK STE 200, 67208
 685-1491 3901730414
 47 M 3901 74 ORS

FARHA MD,GEORGE J, 818 N EMPORIA STE 200, 67214
 263-0296 2101570358
 27 M 2101 64 GS

FARHA MD,S JIM, 818 N EMPORIA SUITE 200, 67214
 263-0296 1001570419
 31 M 1001 65 TS

FARLEY MD,JAMES A, ST JOSEPH MED CTR 3600 E HARRY, 67218
 689-5671 1902782229
 50 M 1902 82 PATH

FEAREY MD,ALAN J, 3311 E MURDOCK, 67208
 689-9410 1902780609
 53 M 1902 80 IM

FELT MO,SAMUEL E, 550 N HILLSIDE, 67214
 688-2825
 46 M 1902 75 PATH

FERNANDEZ MD,HECTOR O, 1515 S CLIFTON STE 460, 67218
 683-2299 74809660129
 41 M 74809 76 GS

FERRIS MO,BRUCE G, 825 N HILLSIDE, 67214
 688-7500 1902690324
 43 M 1902 70 PS

FEUILLE JR MD,EOMOND G, 551 N HILLSIDE #510, 67214
 685-0559 4802750531
 50 M 4802 76 OBG

FIELOS O.O.,STEPHEN, 7200 W 13TH, 67212
 721-1200 2878720086
 42 M 2878 73 FP

FISHER MD,RAY F, 3243 E MURDOCK STE 500, 67208
 684-0251 1902742227
 49 M 1902 77 IM

FITZGERALD MO,EDWARD J, 3600 E HARRY, 67218
 689-5050 3006500152
 22 M 3006 50 R

FITZIG MO,SANFORD, 3311 E MURDOCK, 67208
 689-9185 4102720640
 46 M 4102 79 U

FLATT MD,DAVID, 551 N HILLSIDE #410, 67214
 684-3838 1803750374
 45 M 1803 CO

FLEMING MO,FORNEY W, 551 N HILLSIOE #210, 67214
 686-1010 4802690431
 43 M 4802 75 ORS

FLOWERS JR MD,CLELL B, 855 N HILLSIDE, 67214
 685-1381 1902550395
 22 M 1902 55 FP

FORO MO,CHARLES R, 232 S MAIZE RD, 67209
 722-0568 1902630241
 38 M 1902 64 OPH

FOWLER MO,ROBERT J, 3311 E MURDOCK, 67208
 689-9236 2802630169
 37 M 2802 70 IM

FRANCIS MO,NORTON L, 55 VIA ROMA, 67230
 3005350254
 10 M 3005 46 00

FRANCISCO MD,DAN A, 551 N HILLSIDE #401, 67214
 264-8604 1803751508
 40 M 1803 81 CD

FRANCISCO MO,LINDA L, 818 N EMPORIA STE 310, 67214
 263-5891 1803741448
 47 F 1803 82 NEP

FRENCH MO,JAMES E, 1515 S CLIFTON #420, 67218
 684-5237 3005780437
 53 M 3005 80 GS

FRENCH MD,JEROME E, 310 S HILLSIOE, 67211
 684-2838 1103710223
 44 M 1103 82 OTO

FRITZEMEIER MD,WILLIAM H, 8928 PEPPERTREE CIRCLE, 67214
 1902410178
 14 M 1902 41 00

FROMER MO,JOEL, 2627 E CENTRAL, 67214
 684-0501 16501750275
 46 M 16501 81 A

FROMM MO,ARTHUR H, 315 N HILLSIDE STE C, 67214
 685-2281 1902630267
 37 M 1902 64 FP

FULTON MO,JOHN K, 236 S TERRACE OR, 67218
 5605430360
 18 M 5605 50 00

GALICIA MO,JOSEPH P, 551 N HILLSIDE #410, 67214
 684-3838 1902690413
 42 M 1902 70 CD

GALVAN MD,ALONSO, 3243 E MURDOCK STE 500, 67208
684-0251 64906640013
38 M 64906 72 IM

GARO MD,RAYMONO F, 7077 E CENTRAL #1, 67206
1902270074
01 M 1902 81 00

GARDNER MO,JARED J, 550 N HILLSIOE, 67214
688-7700 801710964
44 M 801 89 PATH

GAUGHAN EXEC DIR,CAROLYN N, KANSAS ACAOEMY OF FMLY PHYS,
67226
652-7244
00 F

GENILO MD,CELESTE A, 3311 E MURDOCK, 67208
689-9445 74801623470
39 F 74801 62 AN

GEORGE MD,EARL F, 2146 N OLO MANOR, 67208
681-3320 1902650268
35 M 1902 66 FP

GERBER MD,ALLEN D, 7111 E 21ST, 67206
682-1053 1902742430
48 M 1902 78 GS

GILMARTIN MD,RICHARD C, 2620 E CENTRAL, 67214
686-6866 4112580269
32 M 4112 77 PON

GOERING MO,RANOALL V, 1969 W 21ST, 67203
832-9024 1902840644
58 M 1902 85 FP

GOLDBERG MO,HERBERT R, UKSM-WICHITA 1010 N KANSAS, 67214
261-2631 3508590309
33 M 3508 64 PO

GONZALEZ MO,HIRAM, 1431 S BLUFFVIEW OR #203, 67218
681-1384 64901520575
20 M 64901 71 P

G000 O O,FREORICK C, 550 N HILLSIDE, 67214
688-2222
51 M 2878 79 EM

G000PASTURE MO,HEWITT C, 818 N EMPORIA STE 305, 67214
264-3505 1902690448
43 M 1902 70 IM

GORACKE MO,00UGLAS S, 3243 E MURDOCK STE 401, 67208
686-7327 1902850631
58 M 1902 85 AN

GOROON MD,JAMES R, 3311 E MURDOCK, 67208
689-9260 1611781071
53 M 1611 83 IM

GOYLE MO,KRISHAN K, 1150 N ST FRANCIS, 67214
267-9906 49529640055
34 M 49529 76 CD

GOYLE MO,VIMAL, 1150 N ST FRANCIS, 67214
267-9906 49529670108
41 F 49529 76 08G

GRAUEL MO,CHARLES W, 14821 SHARON LN, 67230
733-0667 1902700451
44 M 1902 71 AN

GRAVES MD,JACK W, 610 RUTLANO, 67206
1902420246
17 M 1902 42 00

GRAY MO,C LUCIEN, 3311 E MURDOCK, 67208
689-9227 1902450293
21 M 1902 45 ENT

GRAY MD,H TOM, 9 VIA ROMA, 67230
401440313
19 M 401 55 00

GREER MO,JAMES A, 3311 E MURDOCK, 67208
689-9227 1611690688
43 M 1611 78 0TO

GRENE MD,ROBERT BRUCE, 655 N WOODLAWN, 67208
684-5158 1902780706
53 M 1902 0PH

GRIEBEL MO,DDNNA J, 3243 E MURDOCK #300, 67208
681-0736
58 F 1902 89 ON

GROSS MD,BRIAN M, 1035 N EMPORIA #265, 67214
269-4026 2803820336
56 M 2803 PM

GRUSHNYS MO,ARNOLO, 14419 TIPPERARY CIR, 67230
40721590111
19 M 40721 70 00

GSELL MO,GEORGE F, 7373 E 29TH ST N #W104, 67226
1601340492
07 M 1601 34 00

GUTHRIE MO,RICHARD A, 1515 S CLIFTON STE 250, 67218
687-3100 2803600204
35 M 2803 73 PD

HABASHY MO,SHAWKY N F, 8404 W 13TH STE 230, 67212
722-6109 33004650056
43 M 33004 80 08G

HAGAN MO,C THDMAS, UKSM WICHITA 1010 N KANSAS, 67214
261-2622 3D06420205
16 M 3D06 42 IM

HAGAN MD,FRANCIS J, 14817 E 29TH NORTH, 67228
3006390314
13 M 3006 39 00

HAGAN MD,ROBERT C, 3311 E MURDOCK, 67208
689-9306 1902770573
52 M 1902 82 GE

HAGAN MD,STEPHEN F, 1250 W MAPLE, 67213
262-1057 2834800503
53 M 2802 81 PUD

HALL MD,J ROGER, 1148 S HILLSIDE #107, 67211
685-5227 4802680517
42 M 4802 76 DPH

HARRIS MD,FRANK H, 2026 N OLO MANOR, 67208
1001390208
09 M 1001 39 00

HARRISON MD,PAUL BARRY, 3243 E MURDOCK STE 404, 67208
685-6222 1902742154
49 M 1902 78 GS

HART MD,DILLIS L, 1515 S CLIFTON STE 300, 67218
688-0135 3901640369
36 M 3901 67 GS

HART MO,JOHN J, UKSM - WICHITA 1010 N KANSAS, 67214
261-2622 2803800424
53 M 74808 78 GP

HARTLEY MD,FDUNT K, 3007 E CENTRAL, 67214
686-7369 1902530343
25 M 1902 53 GS

HARTLEY MD,JAMES M, 818 CARRIAGE PKWY, 67208
685-8231 2604710581
45 M 2604 79 FP

HARTMAN MD,KECK R, 818 N EMPORIA STE 305, 67214
264-3505 1902820708
55 M 1902 IO

HARTWELL MO,KIMBERLY, 855 N HILLSIDE, 67214
685-1381 1902821828
56 F 1902 83 FP

HARTWELL MD,RICK L, 855 N HILLSIDE, 67214
688-2222 1902820716
83 M 1902 83 FP

HARVEY MO,ROSEMARY B, 2230 CARDINAL DR, 67204
1902490287
24 F 1902 49 00

HASSAN MO,RIZWAN U, 1515 S CLIFTON STE 360, 67218
686-2831 70404710131
47 M 70404 70 N

HASTINGS MD,GLEN E, 1431 S BLUFFVIEW STE 109, 67218
685-3030 1902620342
32 M 1902 67 IM

HATTRUP MD,RICHARD J, 1148 S HILLSIDE, 67211
682-9477 300657D282
31 M 3006 59 FP

HAWLEY MD, RAYMOND G, 929 N ST FRANCIS, 67214
 268-5559 1902650357
 39 M 1902 66 PATH

HAYES MD, WILLIAM L, 3243 E MURDOCK STE 500, 67208
 684-0251 1902530351
 28 M 1902 53 CD

HAYNES MD, DEBRAH G, 8100 E 22ND ST N #2200, 67226
 683-4334 1902790833
 54 F 1902 80 FP

HAYS MD, THOMAS H, 7111 E 21ST, 67206
 684-2851 1902750505
 49 M 1902 76 FP

HEALY MD, PATRICK M, 818 N EMPORIA STE 101, 67214
 263-1574 3006820408
 56 M 3006 86 AN

HENNING MD, CHARLES E, 320 N HILLSIDE, 67214
 682-3221 1902630330
 37 M 1902 64 ORS

HENWDD MD, JOHN R, 7602 E HARRY, 67207
 682-7411 3901820707
 52 M 3901 85 FP

HERBOLD MD, DAVID R., 550 N HILLSIDE, 67214
 688-7700 2802761433
 42 M 2802 88 PATH

HERED MD, JOHN, 1515 S CLIFTON #370, 67218
 686-7222 2802670292
 41 M 2802 73 N

HERSHBERGER DD., GROVER, 1245 N WEST ST, 67203
 945-6910 2878790424
 47 M 2878 80 GP

HERSHORN MD, SIMON E, 3333 E CENTRAL STE 214, 67208
 685-1291 1902460205
 22 M 1902 46 R

HESSE MD, JAMES F, 818 CARRIAGE PKWY, 67208
 685-8231 1902820775
 54 M 1902 FP

HETT MD, EDWARD J, 1969 W 21ST, 67203
 832-9024 1902810401
 55 M 1902 82 FP

HINSHAW JR MD, CHARLES T, 1133 E SECOND, 67214
 262-0951 1902580413
 32 M 1902 59 PATH

HINSHAW MD, ALFRED H, 1655 GEORGETOWN #307, 67218
 1902330221
 D7 M 1902 33 DD

HIZDN MD, RAMON R, 929 N ST FRANCIS, 67214
 268-5906 74801622503
 38 M 7480 62 DR

HODSDN MD, HERVEY R, 8809 E HARRY APT 909, 67207
 1606310516
 D3 M 1606 31 DD

HOFFMAN MD, JAMES E, 929 N ST FRANCIS, 67214
 268-8641 1902640386
 38 M 1902 85 IM

HOLDEN JR MD, RAYMOND F, 262 S BRIDGESIDE, 67218
 2802330394
 10 M 2802 56 DO

HOLLIS MD, KENNETH W, 7015 E CENTRAL, 67208
 652-9221 1902790922
 54 M 1902 GS

HOLLWAY MD, KEVIN B, 1035 N EMPORIA #130, 67214
 264-3222 1902840831
 57 M 1902 85 P

HOLMES MD, JED, 7111 E 21ST, 67206
 684-2851 3005780593
 53 M 3005 79 FP

HOLT MD, JOHN M, 901 GEORGE WASHINGTON BLVD, 67211
 684-2169 1902610380
 35 M 1902 62 IM

HORBELT MD, DOUGLAS V, 3243 E MURDOCK L-G, 67208
 681-0251 4802721744
 47 M 4802 73 DBG

HORSLEY MD, JAMES I, 2501 E CENTRAL, 67214
 683-6613 6493380081
 46 M 64933 PM

HOUSEHOLDER MD, DANIEL FAIR, 7705 KILLARNEY CT, 67206
 268-5915 1902700559
 43 M 1902 71 NM

HOUSEHOLDER MD, MARTHA S, 835 N HILLSIDE, 67214
 685-4395 1902720991
 46 F 1902 73 D

HOWARD MD, DONALD O, 82 VIA VERDE, 67230
 1902380236
 11 M 1902 38 DD

HUEBERT MD, DEAN A, 34 VIA VERDE, 67230
 1902460248
 22 M 1902 46 DD

HUGHES D O, STEVEN R, 1520 S CLIFTON, 67218
 689-5775 2878820048
 49 M 2878 83 FP

HUGHES MD, JOHN D, 818 N EMPORIA STE 200, 67214
 263-0296 1902800529
 51 M 1902 81 GS

HULTGREN MD, MYRON K, 450 N ARMDUR, 67206
 685-1382 1902681163
 41 M 1902 69 FP

HUMMER MD, LLOYD M, 3311 E MURDOCK, 67208
 689-9323 3901570298
 32 M 3901 66 IM

HUNO MD, LARRY R, 3333 E CENTRAL STE 408, 67208
 682-0411 1902780838
 52 M 1902 81 PD

HUSTEAO MD, ROBERT F, 2401 N PERSHING, 67220
 681-0451 801540309
 28 M 801 63 AN

HUTCHINSON MD, STEVEN A, 551 N HILLSIDE #550, 67214
 682-2911 1902840920
 59 M 1902 GS

HUYCKE MD, EDWARD J, 9208 PEPPERTREE CIR, 67226
 686-5950 1902530424
 28 M 1902 53 IM

HYDER MD, JACE W, 752 N MISSION, 67206
 687-1090 1902790990
 52 M 1902 CRS

HYNES MD, HENRY E, 818 N EMPORIA STE 403, 67214
 262-4467 53902580120
 35 M 53902 65 HEM

IBARRA MD, J LUIS, PO BOX 780163, 67278
 262-1853 64901460084
 20 M 64901 59 P

IDBEIS MD, BADR, 818 N EMPORIA #200, 67214
 263-1177 87501720591
 47 M 87501 80 TS

ISAACS MD, JUANITA J, PO BOX 8037, 67208
 684-0201 2101720538
 43 F 2101 84 P

JACKSON MD, CHARLES R, 1035 N EMPORIA STE 135, 67214
 263-0812 1606530486
 27 M 1606 60 GS

JACOB MD, KANNAMPALLY L, 1515 S CLIFTON STE 320, 67218
 689-8899 49537590075
 31 M 49537 76 U

JADHAV MD, KISHOR B, 818 N EMPORIA STE 101, 67214
 263-1574 49517 76 AN

JAMES MD, DONALD L, 1301 N WEST, 67203
 945-5245 3901710553
 42 M 3901 81 DTD

JAMES MD, PHILIP C, 3311 E MURDOCK, 67208
 689-9442 1902840954
 51 M 1902 86 PD

JEHAN MD, SAYED S, 635 N MAIN, 67202
 268-8036 70403590141
 33 M 70403 75 P

JENNEY MD,CHARLES B, 818 N EMPORIA SUITE 200, 67214
263-0296 2834610364
34 M 2834 68 GS

JENSEN MD,OARAN L, 551 N HILLSIDE STE 540, 67214
685-7234 3DD579D645
52 M 3D05 8D 08G

JESTER MD,SHELBY L, 818 N EMPORIA STE 3D7, 67214
268-6189 41D774D274
43 F 41D2 78 AN

JDCHEMS MD,GREGORY E, 55D N HILLSIDE, 67214
688-2366 19D281D443
55 M 19D2 83 PD

JOHNSDN MD,CARDL ANN, 3243 E MURDOCK SUITE 3D3, 672D8
688-307D 1902770727
49 F 19D2 78 FP

JOHNSDN MD,CARDLYN K, WESLEY MEO CTR 55D N HILLSIDE, 67214
688-2360 1902800570
48 F 1902 81 NPM

JOHNSON MD,DAVID B, 818 N EMPORIA STE 403, 67214
262-4467
54 M 702 HEM

JOHNSON MD,GEDRGE K, UKSM WICHITA 101D N KANSAS, 67214
261-2622 12D5670277
40 M 12D5 79 IM

JOHNSON MD,MATTHEW S, 7150 E HARRY, 67207
687-2561 19D285D887
59 M 19D2 87 FP

JOHNSDN MD,TERESA K, 818 CARRIAGE PARKWAY, 67208
651-2210 190285D895
58 F 19D2 86 FP

JOHNSDN MD,THOMAS E, 3333 E CENTRAL STE 214, 672D8
685-1291 1643670387
41 M 1643 75 R

JOHNSTON MD,SARAH C, 550D E KELLOGG, 67218
685-2221 19D276D314
51 F 19D2 IM

JONES MD,JAY S, 1125 N TOPEKA, 67214
267-0362 64914770864
50 M 64914 ORS

JONES MD,JON K, 550 N HILLSIDE, 67214
688-2222 190283D983
55 M 19D2 88 IM

JONES MD,RDDNEY, 1D40 RUTLAND, 672D6
687-2527 180382D798
56 M 1803 84 AN

JOSEPH JR MD,JAMES, 3243 E MURDOCK STE 200, 67208
685-1491 7D284D571
56 M 702 ORS

JOSE MD,GARY D, 1035 N EMPORIA ST #27D, 67214
264-57DD 190277D778
51 M 1902 78 GS

JUDILLA JR MD,FRANCISCO, 818 N EMPORIA STE 1D1, 67214
263-1574 7481171D451
44 M 74801 76 AN

KADER MD,GIHAN S, 3311 E MURDOCK, 672D8
689-9137
49 F 6D501 N

KADISDN MD,HERBERT I, 929 N ST FRANCIS, 67214
268-5916 161169D921
44 M 1611 75 R

KAHN MD,DAVID M, 3311 E MURDOCK, 672D8
689-9316 384379D517
54 M 3843 85 DPH

KARDATZKE MD,E STANLEY, 224 ARCADIA, 67212
172D64D721
39 M 172D 65 D0

KARDATZKE MD,JDN K, 8200 W CENTRAL STE 1, 67212
721-4544 172D62D673
36 M 172D 65 FP

KASHA MD,ROBERT L, 8454 E MT VERNON, 67207
283438D504
11 M 2834 46 OD

KASSEBAUM MD,KENNETH G, 8911 E ORME, 67207
686-51D8 16D66DD557
34 M 16D6 75 CHP

KATER MD,ERIC D, 36D0 E HARRY, 67218
689-5D50 19D282D899
56 M 19D2 87 OR

KAUFMAN MD,EUGENE E, 3243 E MURDOCK STE 200, 67208
685-1491 19D256D617
30 M 19D2 56 ORS

KEITH MD, REX B., 925 N. EMPORIA, 67214
263-22D7 19D285D9D9
59 M 19D2 FP

KELLER MD,JAMES P, 1431 S BLUFFVIEW STE 112, 67218
685-1284 19D274D631
48 M 19D2 75 IM

KENDALL MD,TOM E, 825 N HILLSIDE, 67214
688-7500 39D162D422
37 M 39D1 70 PS

KENORICK MD,J GILLERAN, 550 N HILLSIDE, 67214
688-2088 19D246D311
20 M 19D2 47 AOM

KENNEDY MD,GERALD T, 551 N HILLSIDE STE 410, 67214
684-3838 19D261D444
35 M 19D2 62 GE

KETTERMAN MD,DIANA K, 2757 S SENECA, 67217
264-5182 19D2852111
58 F 19D2 87 FP

KEYES MD,MICHAEL J, PO 80X 8037, 67208
684-02D1 21D170D669
44 M 21D1 84 P

KHICHA MD,GYANCHAND J, 818 N EMPORIA STE 200, 67214
263-0296 4953D61D071
37 M 4953D 73 TS

KHOURY MD,GEORGE H, 3333 E CENTRAL STE 416, 672D8
681-2021 33D0255D101
32 M 33D02 75 PD

KIM MD,PAIK N, 3243 E MURDOCK SUITE 300, 67208
681-0736 583D258D403
33 M 583D2 75 HEM

KIRK JR MD,E DAVID, 1431 S BLUFFVIEW OR STE 209, 67218
685-1351 19D262D440
34 M 19D2 63 IM

KIRSCH MD,MARK A, 3243 E MURDOCK STE 401, 67208
686-7327 19D282D953
53 M 19D2 85 AN

KISER MD,JOHN L, 3243 E MURDOCK STE 404, 67208
685-6222 28D262D465
37 M 28D2 65 GS

KISER MD,WILLARD J, 1446 WILLOW RD, 672D8
47D53D0211
05 M 47D5 34 D0

KITCHEN MD,ROBERT R, 342D E DOUGLAS, 67208
685-2355 19D252D399
26 M 19D2 52 CHP

KLAFTA MD,LEONARD A, 3311 MURDOCK, 67208
689-9423 161162D817
37 M 1611 87 NS

KLEIN MD,TERRY D, 76D2 E HARRY, 67207
682-7411 19D285D941
55 M 19D2 FP

KLINGMAN MD,OLIVIA D, 81D0 E 22ND ST N #22D0, 67226
683-4334 19D279D493
53 F 19D2 8D FP

KLONIS D D, DEMOSTHENIS, 551 N HILLSIDE #410, 67214
684-3838 487883D321
55 M 4878 D0

KLUZAK MD,THOMAS R, 550 N HILLSIDE, 67214
688-71D7 1643741870
49 M 1643 88 PATH

KNAPP MD,LESLIE E, 47D0 W 13TH STE 106, 67212
19D225D073
96 M 19D2 25 D0

KNAPP MD,M ROBERT, 810 N LORRAINE, 67214 685-2207 3519470615 23 M 3519 55 AN	LIES MD,RICHARD 8, 3311 E MURDOCK, 67208 689-9131 1902680604 42 M 1902 69 RHU
KNEIDEL MD,THOMAS W, 1111 N ST FRANCIS, 67214 267-1924 4101660562 40 M 4101 70 ORS	LIN MD,JOE J, 929 N ST FRANCIS, 67214 268-5420 24404690112 42 M 24404 72 PATH
KNIGHT MD,LAURA C, 929 N ST FRANCIS, 67214 268-5912 502680188 42 F 502 DR	LINDHOLM MD,DWIGHT L, 3333 E CENTRAL STE 602, 67214 651-0033 1902781044 53 M 1902 89 PDN
KNIGHT MO,PHILIP J, 818 N EMPORIA STE 200, 67214 263-0296 502680650 42 M 502 82 PDS	LINHARDT MD,RONALD D, 1035 N EMPORIA #290, 67214 264-6267 2803640320 36 M 2803 68 OBG
KOEHN MD,NORMAN S, 3311 E MURDOCK, 67208 687-5859 3901851815 49 M 3901 IM	LITTELL MD,JAMES A, 929 N ST FRANCIS RMC, 67214 268-5048 1902711305 44 M 1902 72 EM
KOURI MD,SAMMY H, 551 N HILLSIDE STE 550, 67214 682-2911 3901570387 33 M 3901 62 GS	LIVINGSTON D.O.,DOUGLAS R, 551 N HILLSIDE #410, 67214 684-3838 2879770486 52 M 2879 78 PUD
KRAUSE MD,ROLAND L, 230 S RUTAN, 67218 1902530505 25 M 1902 53 00	LOEFFLER MD,JAMES A, 400 N WOODLAWN STE 109, 67208 685-5375 3841630458 36 M 3841 68 A
KREADY MD,JOHN L, 818 CARRIAGE PKWY, 67208 685-8231 1902791091 48 M 1902 80 FP	LOEWEN MD,WILLIAM C, 8200 W CENTRAL STE 1, 67212 721-4544 1902711275 41 M 1902 72 FP
KUBINA MD,GLENN RICHARD, MID-KS ENT ASSN 310 S HILLSIDE, 67211 684-2838 3840730831 47 M 3840 79 OTO	LOHNES JR MD,JOHN H, 3333 E CENTRAL #214, 67208 685-1291 1803820984 55 M 1803 DR
KURTH MD,C JOSEPH, 200 S ROCK RD STE H, 67207 3006350312 10 M 3006 37 00	LOSEE MD,JOHN M, 3243 E MURDOCK STE 401, 67208 686-7327 4301770711 51 M 4301 82 AN
LAI MD,CHUEN-HUEY, 929 N ST FRANCIS, 67214 268-5428 24405780051 53 F 24405 88 PATH	LOVETT MD,PAUL A, 110 PATTON, 67208 1902450391 09 M 1902 45 00
LAI MO,JENG Y, 959 N EMPORIA STE 205, 67214 265-4701 38502670201 41 M 38502 77 TS	LOW MD,HAROLD L, 2481 COOLIDGE, 67204 1902440891 18 M 1902 44 00
LANCE JR MO,JOHN F, PO BOX 8206, 67208 1902450382 20 M 1902 45 00	LUCAS MD,GEORGE L, 3311 E MURDOCK, 67208 689-9495 1001610542 34 M 1001 84 ORS
LATIMER MO,KATHERINE, 3243 E MURDOCK STE 401, 67208 686-7327 401750576 49 F 1205 78 AN	LUCKEROTH MD,LEAH L, 3243 E MURDOCK STE 500, 67208 684-0251 1902861111 58 F 1902 87 IM
LAWN MO,CLAUDIA A, 144 S HILLSIDE, 67211 685-3411 1902751536 50 F 1902 77 R	LUOLOW MD,MICHAEL G, 8200 W CENTRAL STE 1, 67212 721-4544 1902821054 56 M 1902 85 FP
LAWN MD,RAYMONO A, 715 N MISSION RD, 67206 683-8991 2604360431 09 M 2604 49 AM	LUEKEN MD,LUEKE B, 3311 E MURDOCK, 67208 689-9234 40723520110 23 M 40723 63 OBG
LEE JR MD,EDWARD S, 2002 E 17TH, 67214 4707370195 09 M 4707 52 00	LUTZ MD,RICHARD E, 550 N HILLSIDE, 67208 688-2360 55 M 1902 88 PD
LEE MD,MARTIN W, 3243 E MURDOCK STE 300, 67208 681-0736 4814820870 56 M 4814 86 ON	LYGRISSE MD,OANIEL V, 3311 E MURDOCK, 67208 689-9107 64914782838 50 M 64914 82 FP
LEE MD,R REX, 6155 E HARRY, 67218 682-1754 3901550637 29 M 3901 55 FP	LYNCH MO,MARY A, 320 N HILLSIDE, 67214 682-3221 1002772147 48 F 1002 81 FP
LEISY MD,JERALD W, 3310 E DOUGLAS STE 101, 67208 681-2937 1902680582 42 M 1902 70 P	MAGIOSON MD,ELLIOTT ARTHUR, 116 LONGFORO CT, 67206 689-9272 1611681166 43 M 1611 21 PATH
LEITNER MD,YORAM B, 3311 E MURDOCK, 67208 689-9227 3519770821 53 M 3519 82 OTO	MAILMAN MO,GERSHOM, PO BOX 20467, 67208 3519530791 26 M 3519 57 00
LESKO MO,PAUL D, 905 N EMPORIA, 67214 262-7598 5607590820 49 M 5605 ORS	MANASCO MD,RONALO R, 3243 E MURDOCK STE 401, 67208 686-7327 512830846 52 M 512 AN
LEVINE MO,WILLIAM R, UKSM-WICHITA 1010 N KANSAS, 67214 261-2647 1902670561 42 M 1902 68 P	MANDELBAUM MD,MARK A, PO BOX 47668, 67201 684-3838 3901791057 53 M 3901 83 N
	MANNING MD,ROBERT T, UKSM WICHITA 1010 N KANSAS, 67214 688-2212 1902540586 27 M 1902 54 IM

MANSOUR MO,BAOIE S, 3243 E MURDOCK STE 401, 67208
686-7327 91502690073
45 M 33002 76 AN

MARBACH MO,JAMES C, 3600 E HARRY, 67218
689-5043
57 M 4804 90 FP

MARSH MO,CONNIE M, 1035 N EMPORIA 130, 67214
264-3222 1902752362
47 F 1902 78 P

MARSH MD,HENRY O, 905 N EMPORIA BOX 3298, 67201
262-7598 1611431721
18 M 1611 46 ORS

MARTIN JR MO,GLEN E, 624 LONGFORO LANE, 67206
1902490457
20 M 1902 49 00

MARTIN MO,RONALO L, UKSM - WICHITA 1010 N KANSAS, 67214
261-2647 1606710824
45 M 1606 80 P

MARYMONT JR MO,JESSE H, WESLEY MEO CNTR 550 N HILLSIOE, 67214
688-2847 3515540368
28 M 3515 64 PATH

MASTIO JR MO,GEORGE J, 3243 E MURDOCK LEVEL G #12, 67208
684-5235 1902520470
25 M 1902 52 GS

MATASSARIN MO,8ENJAMIN M, 551 N HILLSIOE #410, 67214
684-5243 1902450412
20 M 1902 45 IM

MATASSARIN MO,FREORICK W, 743 N EMPORIA, 67214
265-2382 1902370397
15 M 1902 37 U

MATZEN MO,TEO A, PO BOX 782088, 67278
686-5151 1902851204
52 M 1902 88 P

MAURICIO MO,OENNY G, 2456 N WOODLAWN, 67220
685-1382 1401850836
54 M 87 FP

MAWOSLEY MO,MICHAEL W, 1010 N KANSAS, 67214
261-2622 1902741662
49 M 1902 75 PO

MCBOYLE MO,MARILEE, 818 N EMPORIA STE 200, 67214
263-0296 1902770867
52 F 1902 78 GS

MCCLANAHAN MO,WARO A, 1515 S CLIFTON STE 130, 67218
684-8211 3005480409
22 M 3005 49 ORS

MCCLELLAN MO,ERNEST L, 3243 E MURDOCK STE 401, 67208
686-7327 4802700895
38 M 4802 73 AN

MCCOWN MO,ROBERT 8, 3600 E HARRY, 67218
689-4850 2846770235
52 M 2846 87 FP

MCCOY MO,C PATRICK, 3243 E MURDOCK STE 401, 67208
686-7327 1902791261
53 M 1902 83 AN

MCCOY MO,CHARLES P, 3333 E CENTRAL STE 301, 67208
3006420302
17 M 3006 42 00

MCOONOUGH MO,W OAVIO, 3311 E MURDOCK, 67208
689-9239 3305761337
48 M 3305 82 U

MCGUIRE MO,WILLIAM F, 3333 E CENTRAL STE 801, 67208
683-5655 4101431601
17 M 4101 49 PO

MCGUIRE,CHARLES W, 3333 E CENTRAL STE 214, 67208
685-1291 1803841124
57 M 1803 OR

MCINNIS MO,OALTON 8, 2405 E PAWNEE, 67211
685-2153
45 M 3901 88 FP

MCMASTER MO, JOHN F, 315 N HILLSIOE #B, 67214
681-0423 2106821146
54 M 2106 83 FP

MC MULLEN MO,BRUCE R, 1122 S CLIFTON, 67218
682-5012 4002790713
53 M 4002 80 IM

MCNICKLE MO,GEORGE A, 222 S RIOGE RO, 67209
945-0142 1902750742
49 M 1902 FP

MCQUEEN MO,OAVIO ARNOLO, 905 N EMPORIA BOX 3298, 67201
262-7598 64914750138
47 M 64914 77 ORS

MEEK JR MO,JOSEPH C, UKSM-WICHITA 1010 N KANSAS, 67214
261-2650 1902570582
31 M 1902 57 IM

MEEKER II MO,BRUCE P, 345 N HILLSIOE, 67214
686-3384 1902580626
30 M 1902 59 08G

MELEAN MO,JAIME, 1152 S CLIFTON, 67218
688-0321 17602670015
40 M 17602 78 CO

MELHORN MO,J MARK, 1111 N ST FRANCIS, 67214
267-1924 1902791317
53 M 1902 82 ORS

MELHORN MO,KATHERINE J, 3243 E MURDOCK LEVEL A, 67208
688-3110 1902810532
55 F 1902 83 PO

MENAKER MO,JEROME S, 2703 E CENTRAL, 67214
685-1227 1002410423
16 M 1002 49 08G

MENOIONES MO,L MARLENE, 2501 E CENTRAL, 67214
687-5733 1611701078
45 F 1611 75 O

MENEHAN MO,H JAMES, 2959 N ROCK RO, 67226
681-1152 1902530581
26 M 1902 53 PO

MENKING MO,F W MANFREO, 3311 E MURDOCK, 67208
689-9336 40715610037
34 M 40715 74 PO

MENKING MO,SUSAN MARGARET, UKSM WICHITA 1010 N KANSAS, 67214
261-2631 3840671461
41 F 3840 77 PO

MERCAOER MO,MARIO S, 818 N EMPORIA STE 307, 67214
264-9476 74801690151
43 M 74801 78 AN

MEREOTH MO,W TOM, 1035 N EMPORIA STE 105, 67214
263-7285 4812610681
35 M 4812 69 IM

MERRIFIELD MO,TERRY S, 818 CARRIAGE PKWY, 67208
685-8231 1002751221
47 F 1002 76 FP

MERSHON MO,JAMES C, PO BOX 2517, 67201
263-5889 1803630727
37 M 1803 70 CO

MESSAMORE MO,OE8RA L, 551 N HILLSIDE STE 540, 67214
685-7234 1902841250
58 F 1902 08G

MESSNER MO,STAN A, 8200 W CENTRAL, 67212
721-4544 1902831262
56 M 1902 84 FP

MEYER MO,WARREN E, 130 BRENDONWOOD, 67207
1606511139
27 M 1606 58 00

MICHELBAACH MO,ALBERT P, 4815 E CENTRAL, 67208
684-4750 2101610643
35 M 2101 66 IM

MILFEL0 MO,00UGLAS J, 818 N EMPORIA STE 200, 67214
263-0296 4804720443
45 M 4804 79 TS

MILLER MO,OAVIO PATERSON, 7111 E 21ST N, 67206
684-2851 2803770649
50 M 2803 78 FP

MILLER MO,00N E, 4145 E KELLOGG, 67218
2802440599
20 M 2802 46 00

MILLER MD,ROGER M, 1431 S 8LUFFVIEW STE 205, 67218 788-6270 4102630888 37 M 4102 83 8L8	MURPHY MD,PAUL W, UKSM - WICHITA, 67214 261-2647 1902821348 49 M 1902 83 P
MILLER MD,TOOO A, 8200 W CENTRAL STE 1, 67212 721-4544 1902810559 55 M 1902 82 FP	MURPHY MD,WILLIAM R C, 818 N EMPORIA STE 200, 67214 263-0296 1602680441 43 M 1611 TS
MILLS MO,CHARLES D, 1140 S WATER, 67213 2002140112 89 M 2002 16 00	MURRAY MO,KENT 8, VA MEO CTR 5500 E KELLOGG, 67218 685-2221 3901730872 47 M 3901 74 IM
MILLS MO,PHILIP R, 2501 E CENTRAL, 67214 683-6613 512751938 49 M 512 PM	MURROW MO,RICHARD W, 3243 E MURDOCK STE 500, 67208 685-2561 1902851280 57 M 1902 86 N
MINNS MO,GAROLO O, UKSM-WICHITA 1010 N KANSAS, 67214 261-2650 1902760969 51 M 1902 77 IM	NELLIS MD,STEPHANIE F, 3311 E MURDOCK, 67208 689-9270 1902790744 53 F 1902 81 IM
MIRANDA MO,JOSEPH R, 3311 E MURDOCK, 67208 689-9422 52 M 4812 OR	NELSON JR MO,GUST H, 9127 AUTUMN CHASE, 67206 1902460426 23 M 1902 46 00
MOELLER MD,CHRISTOPHER A, 835 N HILLSIOE, 67214 685-4395 1803831137 55 M 1803 87 D	NELSON MO,GERALO O, 825 N HILLSIOE, 67214 688-7500 1902600601 34 M 1902 61 PS
MONTGOMERYSHORT MO,RUTH G, 1019 W 50TH NORTH, 67204 1902370435 10 F 1902 37 00	NELSON MD,RUSSELL ALAN, 550 N HILLSIOE, 67214 688-2360 1902450510 18 M 1902 45 PD
MOORE MO,OENNIS F, 3311 E MURDOCK, 67208 689-9250 2101620878 36 M 2101 64 HEM	NESMITH MO,LESLIE W, 530 N LORRAINE STE 100, 67214 683-5611 1902660760 40 M 1902 67 OPH
MORGAN III MO,LOUIS S, 8030 E KELLOGG, 67207 683-3811 3901480353 22 M 3901 49 FP	NETHERTON MO,OAVIO M, 315 N HILLSIOE STE A, 67214 686-3391 2803810748 55 M 2803 82 FP
MORGAN MO,OICK A, 3243 E MURDOCK, 67208 686-7327 43 M 3901 AN	NEWBY MO,JAMES P, 818 N EMPORIA STE 200, 67214 263-0296 1902590656 34 M 1902 70 TS
MORGAN MO,JAMES I, PO 80X 17007, 67217 522-2266 1606530834 29 M 1606 56 FP	NEWSOM MD,F CARTER, 3310 E OUGLAS, 67208 685-1443 1201430549 18 M 1201 50 P
MORGAN MO,RANDALL J, 345 N HILLSIOE, 67214 682-4572 1902770999 52 M 1902 08G	NIELSEN MD,MARY L, 3333 E CENTRAL STE 721, 67208 681-2741 1902771081 47 F 1902 78 PATH
MORRISON MO,RICHARD L, 1148 S HILLSIDE STE 102, 67211 684-3391 1902670676 42 M 1902 68 FP	NISLY MO,JANA L, 1611 N MOSLEY, 67214 263-7455 1902851352 58 F 1902 88 FP
MORROW MO,THOMAS F, 3310 E OUGLAS, 67208 685-1443 5606460980 21 M 5606 51 P	NIXON MD,WILLIAM A, 2916 MENLO, 67211 1902441111 16 M 1902 44 00
MOSER MO,SCOTT E, 3243 E MURDOCK STE 303, 67208 688-3070 55 M 4804 87 FP	NORRIS MD,ROBERT P, 8649 E CHERRY CREEK CT, 67207 1902430594 17 M 1902 43 00
MOSIER MO,STANLEY JAY, 818 CARRIAGE PKWY, 67208 685-8231 1902680701 42 M 1902 69 FP	NORTH MO,DORIS G, 1148 S HILLSIOE, 67211 684-5257 1902470413 16 F 1902 47 FP
MROZ MO,MARY K, 3243 E MURDOCK #303, 67208 688-3070 1846810440 57 F 2846 87 FP	NORTON MO,ROBERT K, 3311 E MURDOCK, 67208 689-9235 1001570702 32 M 1001 67 PO
MUETH COUPLANO MO,JOAN D, 7111 E 21ST, 67206 684-2851 2803790801 53 F 2803 80 FP	O'DONNELL JR MO,LEONARD A, 32 NORFOLK, 67208 1902550883 27 M 1902 55 00
MULLINIX MD,JANICE M, 3311 E MURDOCK, 67208 689-9137 2802731089 47 F 3006 77 N	OCHSNER MO,BRUCE B, 1100 N TOPEKA, 67214 263-6273 1902650667 39 M 1902 66 OPH
MURPHY MO,BARRY L, 3243 E MURDOCK STE 500, 67208 684-0251 1902710767 45 M 1902 72 IM	OENHEIMER MO,BURTRAM J, 3311 E MURDOCK, 67208 689-9137 2105731011 48 M 2105 73 N
MURPHY MO,OUANE A, 3243 E MURDOCK STE 200, 67208 685-1491 1902650659 32 M 1902 66 ORS	OLMSTEAD MD,CALVIN G, 818 N EMPORIA STE 304, 67214 268-6856 6002790139 50 M 6002 84 N
MURPHY MO,PATRICK L, 7150 E HARRY, 67207 687-2651 3901811198 55 M 3901 82 FP	OLSON MO,DAN E, UKSM - WICHITA 1010 N KANSAS, 67214 261-2650 702731321 42 M 702 85 PM
MURPHY MD,PAUL M, 3600 E HARRY, 67218 689-5050 3006510492 28 M 3006 57 R	ORTH-BAALMAN MD,DIANE M, 222 S RIOGE RD, 67209 945-5400 1902821402 56 F 1902 83 PD

OSBORNE MO, CONRAO C, 855 N HILLSIOE, 67214
685-1381 1902670714
38 M 1902 68 FP

OSIO MO, ANTONIO L, 4127 E KELLOGG, 67218
689-8677 26404660097
41 M 26404 72 EM

OSORBA MO, WILLIAM G, 2525 W 13TH, 67203
943-9391 2802510635
25 M 2802 54 FP

OSTER MO, JOYCE A, 3311 E MURDOCK, 67208
689-9422 1902791422
54 F 1902 80 OR

OTERO-CAGIOE MO, MANUEL R, UKSM-W IM OEPT 1010 N KANSAS,
67214
261-2650 64901790131
54 M 64901 CO

OUANO JR MO, BIBIANO 8, 1515 S CLIFTON STE 380, 67218
684-5094 74801634391
40 M 74801 79 U

OWEN MO, LARUE W, 236 N BELMONT, 67208
1902500517
19 M 1902 50 00

OWEN MO, PERE A, 1128 S CLIFTON, 67218
681-2108 1902640700
37 M 1902 65 AN

OXLEY MO, OWIGHT K, 550 N HILLSIOE, 67214
688-2810 1902620644
36 M 1902 63 PATH

PAGE MO, RUTH, 1051 N STRATFORD, 67206
1902430616
13 F 1902 43 00

PALKO MO, WILLIAM M, 707 N MAIN, 67203
682-4472 4114820682
56 M 4114 87 8LB

PALMER MO, OAVIO L, PO BOX 9450, 67277
722-9132 1902630631
37 M 1902 64 A

PALTAN JR MO, JOSE O, 929 N ST FRANCIS, 67214
268-5413 40905780036
48 M 84711 87 PATH

PANKOW MO, KIMBERLY J, 2939 N ROCK RD S-100, 67226
636-4344 1902832153
55 F 1902 85 P

PANKOW MO, LARRY M, 2939 N ROCK RD #100, 67226
265-8872 1902831424
49 M 1902 85 P

PARKER MO, HAROLO L, 7027 FARMVIEW CT, 67206
684-1599 1902670731
32 M 1902 68 FP

PARMAN MO, CRAIG R, 2757 S SENECA, 67217
264-5182 1902841403
56 M 1902 87 FP

PASSMAN MO, STEVEN M, 835 N HILLSIOE, 67214
685-4395 2803730671
47 M 2803 83 O

PATTON MO, J MICHAEL, 2535 E LINCOLN, 67211
686-2111 3005780941
51 M 3005 79 FP

PAXTON MO, EDWARD SCOTT, 3600 E HARRY, 67218
689-5672 2802770815
51 M 2802 83 PATH

PAY MO, NORMAN T, 929 N ST FRANCIS, 67214
268-5914 74802680191
45 M 74802 77 NR

PEERY MO, WILLIAM H, UKSM WICHITA 1010 N KANSAS, 67214
261-2650 4802731103
46 M 4802 82 IM

PEIL MO, MICHAEL L, 1035 N EMPORIA #265, 67214
269-4026 1902800847
54 M 1902 81 PM

PELLETIER JR MO, LAWRENCE L, UKSM WICHITA 1010 N KANSAS,
67214
261-2650 3501680841
42 M 3501 71 IM

PENCE MO, CHARLES O, 3311 E MURDOCK, 67208
689-9468 1902680779
42 M 1902 69 ORS

PENNER MO, STEVEN O, 855 N HILLSIOE, 67214
685-1381 1902831441
55 M 1902 86 FP

PENNINGTON MO, KATHERINE, 3333 E CENTRAL STE 201, 67208
685-5271 1902430641
16 F 1902 43 PO

PERALES MO, MERCEDES, 1035 N EMPORIA STE 130, 67214
264-3222 4934810081
57 F 85 P

PETERIE MO, JERRY O, 818 N EMPORIA STE 305, 67214
264-3505 1902752559
48 M 1902 76 IM

PETERS MO, THOMAS J, 3311 N MURDOCK, 67208
689-9190 2803770762
47 M 2803 79 IM

PHILLIPS MO, DENNIS G, 1010 N KANSAS, 67214
261-2622 1902851409
58 M 1902 89 FP

PHIPPS MO, JACK G, 117 BRENOENWOOD CT, 67206
1902530661
21 M 1902 53 00

PIBURN MO, MARVIN F, 125 N ZELTA, 67206
1803480377
22 M 1803 80 00

PICKERT MO, CURTIS B, 3311 E MURDOCK, 67208
689-9109 1902841446
57 M 1902 85 PO

PINSKER MO, JACOB A, 556 BROADMOR CT, 67206
1902350345
06 M 1902 35 00

PLAVAC MO, THOMAS, 551 N HILLSIOE #410, 67214
684-3838
51 M 1102 88 IM

POLINER MO, LAWRENCE R, 551 N HILLSIOE #410, 67214
684-3838 3520690611
43 M 3520 83 CO

POLING MO, TERRY L, 7602 E HARRY, 67207
682-7411 1902620717
36 M 1902 63 FP

POLLMAN MO, STANLEY E, 3600 E HARRY, 67218
689-5668
30 M 3007 84 PATH

POLLOCK MO, ANTHONY G A, 825 N EMPORIA, 67214
264-2806 91905710023
45 M 80305 76 ORS

POOLE MO, BERNARD T, 825 N EMPORIA, 67214
264-2806 53902620318
37 M 53902 73 ORS

POWERS MO, K OLAN, 2703 E CENTRAL, 67214
683-8386 1902470472
23 M 1902 47 GYN

PRESKORN MO, SHELOON H, 929 N ST FRANCIS, 67214
268-5000 1902740879
48 M 1902 75 P

PURINTON MO, LEW W, 1431 S BLUFFVIEW DR STE 109, 67218
685-3030 1902480371
23 M 1902 48 IM

PUTNAM MO, LYLE B, 4700 W 13TH UNIT 1-1, 67212
1902360421
11 M 1902 36 00

RAOONOV MO, RAOMILA, PO BOX 780446, 67278
683-1243 95702600082
34 F 95702 72 R

RAGHAVAN MO, PARULA P, 2404 GREENLEAF CT, 67226
262-7662 49501710783
47 F 49501 80 IM

RAGHAVAN MO, PRAKASH V, 1035 N EMPORIA #245, 67214
262-7662 49501701091
46 M 49501 80 CO

RAMANNA MD,MAGENDRA, 55DD E KELLDGG, 67218 685-2221 56 M 49573 89 IM	RIEGER MD,ERNEST H, 444 N LORRAINE, 67214 682-4591 190256096D 29 M 1902 56 GS
RANDALL MD,GEDRGE R, 31D S HILLSIDE, 67211 684-2838 28D269D617 43 M 28D2 77 DTD	RIORDAN MD,HUGH D, 31DD N HILLSIDE, 67219 682-31DD 5605570579 32 M 56D5 59 P
RAUSA JR MD,FRANCISCO C, 1148 S HILLSIOE, 67211 682-4535 74810660264 42 M 748D8 76 IM	ROACH MD,NEIL E, CHARTER HDSP 89D1 E DRME, 672D7 686-51D8 190267082D 38 M 1902 68 P
RAWCLIFFE JR MD,RDBERT A, 1111 N ST FRANCIS, 67214 267-1924 35D155D778 29 M 35D1 63 DRS	RDAN MD,YEAI, 55D N HILLSIDE, 67214 688-236D 3850167D062 41 M 385D1 82 PD
RAZEK MD,HANA A, 929 N ST FRANCIS, 67214 688-2828 915D471D217 47 F 33DD4 PATH	RDBERTS D.O., ROGER W, PD BDX 47668, 672D1 264-8604 287975D230 49 M 2879 78 CD
RAZEK MD,ZACK A, 818 N EMPDRIA STE 2DD, 67214 263-D296 6D5D17DD242 46 M 6D5D1 77 CDTs	RDBERTS MD,DANIEL K, 55D N HILLSIDE, 67214 685-7234 3DD561D582 36 M 3DD5 71 DBG
READER MD,G WHITNEY, 933 N TDPEKA, 67214 263-5889 21D1751492 48 M 21D1 81 CD	RDBERTSDN MD,JOSEPH K, 818 N EMPDRIA STE 2D0, 67214 263-D296 39D166D793 41 M 39D1 68 GS
REALS MD,WILLIAM J, UKSM WICHITA 1D1D N KANSAS, 67214 261-26DD 3DD645D422 2D M 3DD6 46 PATH	ROBINSON MD,G DONALD, 3333 E CENTRAL STE 61D, 672D8 686-6659 19D254D811 28 M 19D2 54 PD
REAZIN MD,WALTER L, 547 TURNBERRY CIR, 6723D 685-1381 19D258D74D 30 M 19D2 59 FP	RDBINSDN MD,RDBERT H, 558 N STRATFD RD, 672D6 19D253D769 2D M 19D2 53 DD
REDDI MD,RAGHUNATH P, 36DD E HARRY, 67218 689-5D43 4952164D226 36 M 49521 8D RT	RDBL MD,DAVID A, 820D W CENTRAL STE 1, 67212 721-4544 19D27422D1 48 M 19D2 76 FP
REED MD,A J, 2456 N WDDDLAWN, 6722D 685-5691 39D165D704 4D M 39D1 67 EM	RDDRIGUEZTOCKER MD,LILIA, 225 PENRDE, 672D6 275D149D4D2 21 F 275D1 57 OD
REED MO,O CRAMER, 7520 E 21ST #22, 67226 280241D7D3 15 M 2802 46 OO	ROMALIS MD,BRIAN E, 1431 S BLUFFVIEW STE 203, 67218 682-5D69 62D163DD86 39 M 62D1 73 P
REED MO,DAVIO D, 3333 E CENTRAL STE 214, 67208 685-1291 190269D880 43 M 1902 70 DR	ROOS MD,MAUREEN, 925 N EMPORIA, 67214 265-2876 1902781583 53 F 1902 80 FP
REED MO,WILLIAM RANOALL, 550 N HILLSIDE, 67214 688-236D 1611772145 51 M 1611 83 NPM	ROSE MO,SHELBY D, 3333 E CENTRAL STE 721, 67208 681-2741 201268D476 40 M 2012 71 PATH
REISMAN MO,MICHAEL ALAN, 3243 E MURDOCK STE 600, 67208 683-5688 4804752574 50 M 4804 76 OPH	ROSEN MD,DAVID, 818 N EMPORIA STE 105, 67214 265-3774 190274D950 48 M 1902 75 PO
REISWIG MO,JEFFREY S, 8200 W CENTRAL STE 1, 67212 721-4544 1902861382 60 M 1902 87 FP	ROSENBERG MD,THOMAS F, 2627 E CENTRAL, 67214 684-0501 164268D575 41 M 1642 72 A
RELIHAN MD,DONALD A, 655 N WOODLAWN, 67208 684-5158 190254D799 27 M 1902 54 OPH	ROSS MO,DENNIS LEE, 1035 N EMPORIA STE 105, 67214 263-7285 300573D855 47 M 3005 78 NEP
REMPEL MO,JOHN H, 1515 S CLIFTON STE 240, 67218 685-1812 39D162D660 38 M 39D1 70 PS	RUMISEK MO,JOHN O, 818 N EMPORIA STE 200, 67214 263-0296 4804752345 50 M 48D4 CDTs
REYNOLDS MD,TERESA A, 3311 E MURDDCK, 672D8 689-9400 190281D648 52 F 19D2 88 IM	RUSSELL MD,PHILIP W, 3311 E MURDOCK, 67208 689-9351 1902441294 22 M 1902 44 IM
RHDDEN MD,CURTIS H, 3243 E MURDOCK STE 5D0, 67208 684-D251 160659D985 33 M 1606 67 IM	SABIN JR MD,GEDRGE M, 6412 E 9TH, 672D6 500239D304 12 M 50D2 66 OO
RHOODES MO,IVAN E, 144 S HILLSIDE, 67211 685-9289 39D149D383 25 M 39D1 56 R	SABDOR MO,SYED A, 9134 WINDWOOD TALLGRASS, 67226 269-1228 4952D61D234 35 M 4952D 74 P
RHDOES MD,LDWELL M, 315 N HILLSIDE STE C, 67214 685-1461 190253D742 25 M 1902 53 FP	SADIQ MD,SULEMAN, 1144 N ST FRANCIS, 67214 267-0159 704D163D161 4D M 704D1 74 TS
RICHARDS DN MD,JOHN GARY, 929 N ST FRANCIS, 67214 268-5717 4802781569 51 M 48D2 85 PATH	SANCHEZ MD,JOSE J, 3311 E MURDOCK, 67208 689-9287 1643811479 54 M 1643 87 PD
	SANTDS MD,JDAQUIN G, 3243 E MURDOCK STE 500, 67208 684-D251 190281D672 49 M 1902 81 IM

SANTOSCOY MD,GILBERT S, 3311 E MURDOCK, 67208
689-9124 4812620776
38 M 4812 70 GS

SCANLAN MD,TIMOTHY M, 3600 E HARRY, 67218
689-4850 2604711358
46 M 26D4 78 FP

SCHEINBERG MD,KENNETH, 3311 E MURDOCK, 67208
689-9111
42 M 1642 ENT

SCHLACHTER MO,ERNEST R, 406 E CENTRAL, 67202
265-D705 1902520569
24 M 1902 52 FP

SCHLAGECK MD,JOSEPH G, 8200 W CENTRAL S - 1, 67212
721-4544 1902821691
55 M 1902 85 FP

SCHLICHER MD,JOHN E, 3311 E MURDDCK, 67208
689-9344 1803660936
40 M 1803 72 0

SCHLUETER MD,JOHN J, 144 S HILLSIOE, 67211
685-9289 3841560654
31 M 3841 62 R

SCHNEIOER MD,SETH A, 2627 E CENTRAL, 67214
684-0501 164277D779
53 M 1642 80 A

SCHNELLE MD,JOACHIM, 4145 E KELLOGG, 67218
682-6551 40933700030
44 M 4D933 73 FP

SCHOPF MD,CLIFTON C, 222 S RIOGE RO, 67209
945-0142 1902570779
29 M 1902 57 FP

SCHWARTZ MO,V DEAN, 335 WHITFIELD PL, 67206
1902480401
24 M 1902 48 00

SCOTT MD,WILLIAM H, 1431 S BLUFFVIEW STE 111, 67218
685-8262 4901650433
41 M 4901 73 CO

SEN SARMA MO,PRONAB K, 1144 N ST FRANCIS, 67214
267-0159 49518670050
45 M 49518 81 CD

SHAFFER MO,PRESTON J, 3788 RUSHWOOD CT, 67226
3005460653
20 M 3005 47 00

SHAH MD,MUKHTAR H, 1725 E OOUGLAS, 67211
686-7351 704D4640150
40 M 704D4 77 P

SHAPIRO MO,WILLIAM M, 818 N EMPORIA STE 2D1, 67214
263-0348 1606761917
45 M 1606 84 NS

SHAW MO,RICHARD C, 825 N HILLSIOE, 67214
688-7500 1902610720
35 M 1902 62 PS

SHELLITO MO,JOHN G, 18 VIA ROMA, 67230
1606431933
18 M 1606 49 00

SHELLITD MD,JOHN L, 3311 E MURDOCK, 67208
689-9124 2407781271
52 M 2407 84 GS

SHIELD MD,CHARLES, 818 N EMPORIA STE 20D, 67214
263-0296 2802720851
46 M 2802 81 GS

SHOFFNER MO,RICHARD W, 3311 E MURDOCK, 67208
689-9271 3901791405
53 M 3901 82 IM

SHRAOER MO,C ERIC, 655 N WOODLAWN, 67208
684-5158 1902781702
47 M 1902 79 OPH

SHRAOER MD,OOYLE A, 119 N ARMOUR, 67206
1902410623
16 M 1902 41 DO

SHURTZ MD,GLEN L, 3333 E CENTRAL STE 214, 67208
685-1291 48D2782298
40 M 4802 81 R

SIMMS MD,DAVIO ALAN, 3311 E MURDOCK, 67208
689-9422 3401760538
50 M 3401 83 DR

SKIBBA MO,RICHARD M, 3311 E MURDOCK, 67208
689-9477 5606700891
43 M 5606 72 GE

SLUTSKY MO,LAWRENCE JOEL, 929 N ST FRANCIS, 67214
268-5922 3501721122
46 M 3501 79 OR

SMITH D O, JAMES A M, 551 N HILLSIDE #410, 67214
684-3838
50 M 4177 88 IM

SMITH JR MD,WILLARD J, 851 N HILLSIDE, 67214
1602570581
32 M 1611 65 00

SMITH MO,ALVIN L, 929 N ST FRANCIS, 67214
268-5470 5606570874
28 M 5606 72 PATH

SMITH MO,LINOALL E, 3333 E CENTRAL STE 408, 67208
682-0411 1902821771
55 M 1902 PO

SNYDER MO,GREGG M, 902 N HILLSIDE, 67214
687-1441 1803541023
27 M 1803 66 NS

SOLLO MD,DAVIO G, 818 N EMPORIA STE 307, 67214
264-9476 4804841917
59 M 4804 89 AN

SOLOMON MD,HERMAN, 835 N HILLSIOE, 67214
685-4395 27D1620561
37 M 2701 69 D

SOLTZ MD,ROBERT A, 3311 E MURDOCK, 67208
689-932D 2803740821
47 M 2803 77 PO

SOMERS MO,MARVIN M, 2506 BENJAMIN, 67204
1902480427
23 M 1902 48 00

SPANN MD,RICHARD W, 3243 E MURDOCK STE 500, 67208
684-0251 1902650870
40 M 1902 66 PUD

SPARKS MO,STEPHEN T, 2501 E CENTRAL, 67214
683-6613 512841198
56 M 512 89 OM

SPEED MD,JAMES, 3243 E MURDOCK STE 500, 67208
684-0251
56 M IM

STAMPS MO,PHIL, 3600 E HARRY, 67218
689-5668 3901630746
37 M 3901 PATH

STARK MO,JAMES R, 719 BROOKFIELD RO, 67206
1902441472
20 M 1902 44 00

STECKLEY MO,RICHARD ALLEN, PD BOX 47669, 67201
265-1308 2105741271
49 M 2105 80 IM

STEELBERG MD,ELSIE, 2939 N ROCK RO #100, 67226
265-8872 16D6601171
34 F 16D6 84 P

STEIN MD,PAUL S, 551 N HILLSIDE #330, 67214
685-2377 3305660689
40 M 3305 73 NS

STEINBERGER MO,RICHARD E, 851 N HILLSIOE, 67214
685-1371 56120810036
53 M 5612D U

STEMBRIOE MD,TRAVIS W, 551 N HILLSIDE STE 540, 67214
685-7234 48D2761754
47 M 48D2 78 OBG

STEVENS MD, WM. MICHAEL, 551 N HILLSIDE STE 540, 67214
685-7234 1902831751
55 M 1902 OBG

STREET MO,DAVID E, 818 N EMPORIA STE 200, 67214
263-0296 2101611038
35 M 2101 67 GS

STREIT MO, JEROME G, 1131 S CLIFTON, 67218 689-5500 1902771472 48 M 1902 78 FP	TRACY MD, TERRY A, 315 N HILLSIOE #8, 67214 681-0423 2803610579 35 M 2803 68 OBG
STRICKLAND MO, M H VAN, 3100 N HILLSIOE, 67219 682-3100 4804742111 51 M 4804 A	TREGO MD, A JASON, 8404 W 13TH #220, 67212 722-6000 1902842361 55 M 1902 IM
SUERO MO, JESUS T, 1148 S HILLSIOE, 67211 681-3371 74802570655 33 M 74802 57 PUO	TRETBAR MO, HARVEY A, 3243 E MURDOCK #500, 67208 684-0251 1902520712 25 M 1902 52 IM
SULLIVAN MO, LEDNARD L, 3311 E MURDOCK, 67208 689-9454 1902610789 35 M 1902 62 PD	TREWEEKE MD, MICHAEL W, 551 N HILLSIOE #410, 67214 684-5423 1902721157 46 M 1902 73 IM
SV0800A MO, LOIS V, 818 CARRIAGE PKWY, 67208 685-8231 1602660784 39 F 1602 81 FP	TRUOEAU MD, DAVIO L, 3600 E HARRY, 67218 689-4850 2604661318 40 M 2604 78 AOT
SV0800A MO, WILLIAM B, 1035 N EMPORIA #270, 67214 267-5215 1602630583 36 M 1602 81 PON	TRUJILLO MD, ANTERO A, 1431 S BLUFFVIEW STE 117, 67218 685-6466 73701610218 36 M 73701 81 AN
SWEET MO, OONNA E, UKSM WICHITA 1010 N KANSAS, 67214 261-2622 1902791813 48 F 1902 80 IM	TUCKER O O, OAVIO A, 7200 W 13TH, 67212 721-1200 2878850575 54 M 2878 86 FP
TAN MO, DONALD C-S, 808 N EMPORIA, 67214 268-5908 512660924 34 M 512 89 RO	TURITTO MD, GIOIA, 551 N HILLSIOE STE #410, 67214 684-3838 56117810556 57 F 56117 90 CO
TARVER MD, STEPHEN D, 818 N EMPORIA STE 307, 67214 264-9476 1902851751 58 M 1902 AN	UHLIG MO, PAUL J, 1342 ESTATE CT, 67208 683-1596 1902570973 28 M 1902 57 PD
TATPATI MD, DANIEL A, 1144 N ST FRANCIS, 67214 267-0159 49535670039 44 M 49535 78 TS	UHLIG MO, PAUL N, 3311 E MURDOCK, 67208 689-9111 53 M 1902 COS
TATPATI MO, OLGA ADELINA, 1515 S CLIFTON STE 250, 67218 687-3100 49535640041 44 F 49535 78 PO	VAL-MEJIAS MD, JESUS E, 551 N HILLSIOE #410, 67214 684-3838 23101690067 45 M 23101 84 CD
TAYLOR MO, STEVEN L, 3311 E MURDOCK, 67208 689-9422 1902771502 46 M 1902 78 R	VAN GALLERA MD, ROBERT, 3311 E MURDOCK, 67208 689-9107 1902841861 51 M 1902 FP
THAKOR MD, OENNIS S, 310 S HILLSIOE, 67211 684-2838 2307821071 57 M 2307 87 OT0	VAN GEEM MO, THOMAS A, 818 N EMPORIA STE 415, 67214 269-4355 3006831051 54 M 502 89 OBG
THELEN MO, J CHRISTINE, 7373 E 29TH ST N APT 1123, 67226 5104370642 13 F 5104 50 00	VAN LEEUWEN MO, GERARO J, UKSM WICHITA 1010 N KANSAS, 67214 261-2622 1803541074 29 M 1803 80 NPM
THOMAS MO, OARYL L, 2318 E CENTRAL, 67214 262-2415 1902821879 56 M 1902 86 IM	VARENHORST MO, MICHAEL P, 530 N LORAIN STE 100, 67214 683-5611 1803801599 52 M 1803 85 OPH
THOMPSON MD, DANIEL M, PO BOX 4069, 67204 838-3381 1902500746 19 M 1902 50 FP	VAUGHAN MO, O ANN, UKSM-WICHITA 1010 N KANSAS, 67214 261-2647 1902710601 45 F 1902 75 P
TIHEN MD, EDWARD N, 1227 N RIVER BLVD, 67203 1606481426 TILLER MD, GEORGE R, 5101 E KELLOGG, 67218 684-5255 1902670919 41 M 1902 68 AM	VIERTHALER MO, LYLE O, 818 N EMPORIA STE 307, 67214 264-9476 1902801126 54 M 1902 81 AN
TILTON MO, FREDERICK E, BOEING MILIT AIRPL PO BOX 7730, 67277 526-0024 3401770614 40 M 3401 88 OM	VIN ZANT MD, LARRY E, 13741 ST ANDREWS PL, 67230 1902400563 10 M 1902 40 00
TINTEROW MD, MAURICE M, 31DD N HILLSIDE, 67219 4802410706 17 M 4802 46 00	VINE MO, DONALD LEE, 1010 N KANSAS, 67208 261-2622 511660564 39 M 511 79 CO
TOCKER MD, ALFRED M, 225 PENROSE, 67206 4802400808 15 M 4802 53 DO	VINZANT MO, WHITNEY L, 1515 S CLIFTON STE 270, 67218 686-1991 1902711143 45 M 1902 74 GS
TONN MO, GERHART R, 855 N HILLSIDE, 67214 1902441529 16 M 1902 44 00	WADE MO, EDWARD J, 10918 E 13TH ST, 67206 686-6835 1902801142 53 M 1902 83 AN
TOOHEY MD, JOHN S, 3311 E MURDOCK, 67208 689-9277 5605771388 50 M 5605 82 ORS	WADUD MD, ABUL, 1543 S HILLSIDE, 67211 682-6814 70409600059 35 M 70409 74 P
TOSH MD, FRED E, 1900 E NINTH, 67214 268-8391 4706541590 30 M 4706 80 PH	WAKEFIELD MO, KENNETH M, 1131 S CLIFTON, 67218 689-5163 6201480122 24 M 6201 86 FP
	WALKER D.O., MARSHALL D, 1301 N WEST ST, 67203 945-5245 2878720124 41 M 2878 80 OT0

WALL MO, DAVIO M, 925 N EMPORIA, 67214 265-2876 4813781153 53 M 4813 87 FP	WHITAKER MO, JAMES A, 3243 E MURDOCK STE 500, 67208 684-0251 1902721211 44 M 1902 74 IM
WALLING MO, AORIAN E, FARHA MEO LI8 1010 N KANSAS, 67214 681-1152 80302710019 47 M 80302 78 FP	WHITE MO, CHARLES M, 18 VIA VEROE, 67230 3005410656 15 M 3005 48 00
WALLING MO, ANNE O, UKSM WICHITA 1010 N KANSAS, 67214 261-2607 91902710031 47 F 80302 PH	WHITESIDE MD, WILLIAM H, 1431 S BLUFFVIEW S - 108, 67218 681-0086 53902720304 46 M 53903 84 PD
WALSH MO, LESLIE L, 818 N EMPORIA STE 307, 67214 264-9476 2879820548 56 M 2879 AN	WILCOX MD, LOWELL W, 655 N WOODLAWN, 67208 684-5158 4109620764 35 M 4109 67 OPH
WARD MO, CYNTHIA L, 8100 E 22ND ST 8LOG 2200, 67226 683-4334 1902851875 58 F 1902 FP	WILES MO, DENNIS O, 550 N HILLSIDE, 67214 721-4880 1902841969 58 M 1902 PO
WARD MO, LARRY G, 818 N EMPORIA STE 307, 67214 264-9476 1902791911 54 M 1902 82 AN	WILKINSON MO, LARRY K, 1520 S CLIFTON, 67218 689-5775 1902741859 46 M 1902 75 FP
WARREN JR MO, JOHN W, 63 VIA VEROE, 67230 2501390863 15 M 2501 49 00	WILLIAMS MD, CHARLES L, 554 N 800AOMOR CT, 67206 2834432024 16 M 2834 50 00
WARREN MO, LLOYD P, 1202 WILLOW LN, 67208 1902360570 11 M 1902 36 00	WILSON MD, ROBERT L, 841 N 800AOWAY, 67214 263-6131 1902571040 30 M 1902 57 OM
WARREN MO, WIRT A, 526 S BLUFF, 67218 2802330777 09 M 2802 36 00	WINOCHOLZ MO, ARTHUR F, 1969 W 21ST, 67203 832-9044 3901861705 61 M 3901 87 FP
WATTS MO, GARRETT E, 249 N 8ATTIN, 67208 262-7598 3901821867 52 M 3901 83 ORS	WINN MO, TERRIA L, PO BOX 48126, 67201 265-7241 1902822000 56 F 1902 83 OPH
WEAVER MO, J ROBERT, 641 N WOODLAWN #66, 67208 1902480532 21 M 1902 48 00	WISNER JR MO, HARRY J, 5642 COE OR, 67208 3005431394 17 M 3005 47 00
WEAVER MD, JACK O, 1616 COOLIDGE, 67214 2802420865 16 M 2802 46 00	WITTMANN MO, ALBERT F, 555 SAGEBRUSH, 67230 2834380954 10 M 2834 40 00
WEISS MO, DAVIO E, 818 N EMPORIA STE 310, 67214 263-5891 53 M 1902 88 IM	WOLF MD, PATRICK G, 8420 TURON LN, 67207 685-3030 1902771634 52 M 1902 78 IM
WEBER JR MO, HUGO P, 1035 N EMPORIA STE 105, 67214 263-7285 702660718 40 M 702 73 IM	WOLFE MD, FREDERICK, 1035 N EMPORIA #230, 67214 263-2125 3508661532 36 M 3508 69 RHU
WEBSTER MO, BOBBY W, 2903 E CENTRAL, 67214 687-2112 4802742288 48 M 4802 75 OBG	WOOD MO, GARY B, 8527 BOXTHORN, 67226 2802450993 21 M 2802 51 00
WEIPPERT MO, EDWARD J, 8200 W CENTRAL #1, 67212 721-4544 1902701202 44 M 1902 71 FP	WOOD MO, ROBERT O, 1441 N ROCK RD STE 1001, 67206 486-2127 1902530963 26 M 1902 53 FP
WEISS MO, MARLON, 2535 E LINCOLN, 67211 686-2111 3005851440 58 M 3005 88 FP	WOODHOUSE MO, CHARLES L, 46 ST CLOUD PL, 67230 1902340561 10 M 1902 34 00
WELCH MO, LAUREN K, 551 N HILLSIDE #330, 67214 685-2377 1902610860 35 M 1902 62 N	WOODRING MO, CATHY S, 222 S RIOGE RD, 67209 945-0142 3546771708 51 F 3546 82 FP
WELLSHEAR MO, CHARLES C, WICHITA PSY CTR PO BOX 8037, 67208 684-0201 4706581702 30 M 4706 62 P	WRAY MO, ALEXANDER J, 2208 W 13TH, 67203 838-4912 1902490783 19 M 1902 49 FP
WENINGER MD, JOHN H, 1148 S HILLSIDE STE 12, 67211 682-6523 3005620693 32 M 3005 63 FP	WU MD, JIN-TZE, 3333 E CENTRAL SUITE 214, 67208 685-1291 24402670203 41 M 38502 79 TR
WESBROOK MD, C WILSON, 3311 E MURDOCK, 67208 689-9234 1902741247 42 M 1902 75 OBG	WYATT-HARRIS MD, PATRICIA G, 3333 E CENTRAL #504, 67208 683-6766 1902810851 55 F 1902 82 OBG
WEST MD, WILLIAM T, 3311 E MURDOCK, 67208 689-9234 1902490724 24 M 1902 49 OBG	YOUNG MD, DOUGLAS L, 3311 E MURDOCK, 67208 689-9213 1902711259 42 M 1902 72 IM
WHEELER MD, NICKY RAY, 1515 S CLIFTON STE 390, 67218 684-0220 1902741255 48 M 1902 74 PS	YOUNGBERG MD, DEAN I, 959 N EMPORIA #201, 67214 268-6075 1902721254 00 M 1902 73 IM
WHEELER MD, PINCKNEY R, 2168 BELLA VISTA, 67203 3901560896 18 M 3901 57 00	YOUNGMAN DO, DARRELL J, 1035 N EMPORIA #210, 67214 265-1308 52 M 4878 88 CD

ZARNOW MD,HILARY, 929 N ST FRANCIS, 67214
268-5905 1611691994
45 M 1611 74 R

ZATZKIN MD,JAY 8, B18 N EMPORIA STE 403, 67214
262-4467 2002741221
46 M 2002 79 IM

ZEPICK MO,LYLE F, PO 80X 2517, 67201
263-5889 6002740093
50 M 6001 81 CD

ZIEGLER MD,MARK L, 550 N HILLSIDE, 67214
688-2360
56 M 3901 88 NPM

ZIELKE MO,STEVEN L, 223 S HILLSIDE, 67211
683-2666 1643821407
53 M 1643 86 OBG

ZIMMERMAN MO,KENNETH O, 934 CRESTLINE, 67212
526-3925 3901550998
29 M 3901 58 OM

ZONGKER MO,PHILIP E, 3311 E MURDOCK, 67208
689-9422 1902701261
43 M 1902 71 R

WINCHESTER — 913 **(Shawnee County Medical Society)**

HUSTON MO,FRANCIS W, PO BOX H, 66097
1601340638
06 M 1601 34 00

WINFIELD — 316 **(Cowley County Medical Society)**

8HARGAVA MO,8AIKUNTH N, 1317 WHEAT RO, 67156
221-3200 49530640441
37 M 49530 78 U

JOHNSON MO,TERESA F, 1317 WHEAT RO, 67156
221-3200
55 F 1902 82 GS

KAUFMAN MO,LELANO R, PO 80X 643, 67156
221-3350 1902610428
33 M 1902 61 FP

KAUL MO,ANANO N, 1317 WHEAT RO, 67156
221-3200
39 M 49530 IM

MAC KILLOP JR MD,DANIEL, 4 FLEETWOOD DR, 67156
2407380609
11 M 2407 62 00

MILLER MO,FRANKLIN R, 301 PARK, 67156
2401270739
02 M 2401 54 00

PRICE MO,PETER G, 3015 LAKE SHORE OR, 67156
221-9292 64901520338
26 M 64901 57 GS

SAMUEL MO,CHANOY C, 1211 E FIFTH, 67156
221-6100 49527590166
35 M 49527 76 GS

SHAH MO,ASHOK H, 1317 WHEAT RO, 67156
221-3200 49548680173
41 M 49548 08G

SHIPPEY MD,OEAN U, 204 CEDAR LN OR, 67156
221-7129 64914800119
49 M 64914 85 R

STURICH MO,JORGE M, 1211 E 5TH, 67156
221-6100 64914771763
54 M 64914 84 FP

WELLS MO,BRUCE W, PO BOX 643, 67156
221-3350 1902640947
39 M 1902 65 IM

WHITE MO,R 8URNLEY, 117 W 9TH, 67156
221-2950 1902520763
24 M 1902 52 FP

WILCOX EXEC SEC, GENE M., COWLEY CO MEDICAL SOC, 67156
221-2267
00 M

WIN8LAO MO,J KENT, 15 FLEETWOOD, 67156
221-6100 1902761568
51 M 1902 74 08G

WIN8LAO MO,JAMES N, 1211 E 5TH ST, 67156
221-6100 1902530955
27 M 1902 53 GS

WIN8LAO MO,JOHN M, 1211 E FIFTH, 67156
221-6100 1902810818
55 M 1902 82 FP

YATES CENTER — 316 **(Allen County Medical Society)**

ATKIN MO,J D, 1004 E MAISON, 66783
625-2312 3901610052
35 M 3901 63 GP

VORHEES MO,VICTOR J, 204 S MAIN, 66783
625-2162 1902681023
36 M 1902 69 FP

WEBER MO,RUTH M, 204 S MAIN, 66783
625-2162 2846840781
60 F 1902 85 FP

Resident Physician Section

ALLEY-HAY MO,ROBYN, 919 N RUTAN, WICHITA, 6720B
ANDERSEN MO,ANITA M, 1324 T000 CT, WICHITA, 67207
ATKISSON KOWALSKI MO,DEBRA, MENNINGER FO BOX 829, TOPEKA, 66601
ATW000 O.O.,ERIC 8, 80X 829, TOPEKA, 66601
BANKS MO,00NALO E, 4807 BOOTH, SHAWNEE MISSION, 66205
BASHAM MO,BRIAN E, 67B S QUENTIN, WICHITA, 6721B
BASINGER MO,8RAOLEY B, 6747 PAR LN #1410, WICHITA, 67212
BECK JR MO,CALVIN E, 1131 S CLIFTON, WICHITA, 6721B
BEILMAN MO,GREG, 625 EMERSON, WICHITA, 67212
BENNING MO,TIMOTHY C, 1915 HOMESTEAD, WICHITA, 6720B
BERGH MO,JAMES R, 1501 NE 78, KANSAS CITY, 64118
BERNHAROT MO,MARK, 642B OVERBROOK RO, SHAWNEE MISSION, 6620B
BRAMBLE MO,JANA O, 9400 NW BARRY RO, KANSAS CITY, 64153
BRANIECKI MO,MARYLEE A, 4130 EATON, KANSAS CITY, 66103
BROWN MO,JEFFERY C, 7401 SCHOOL, WICHITA, 67212
BROWN MO,T000 A, 1008 S WAVERLY, WICHITA, 6721B
BURKE MO,MICHAEL J, 159 CIRCLE OR, WICHITA, 6721B
CANOELA MO,ANORES, 550 N HILLSIDE, WICHITA, 67214
CARNEY MO,LISA A, 12811 W 88 CIR #128, SHAWNEE MISSION, 66215
CARR MO,SUSAN L, 1010 N KANSAS, WICHITA, 67214
CATO LOWER MO,TERI A, UKSM WICHITA PEO 1010 N KANSAS, WICHITA, 67214
CAYANAUGH MO,TIMOTHY B, 3176 WOOD VIEW RIDGE OR #301, KANSAS CITY, 66103
CHHATRE MO,MAOHUKAR, 39TH & RAINBOW, KANSAS CITY, 66103
CHOWHARY MO,RAVI, 1153B GOODARO, SHAWNEE MISSION, 66210
CHRISTENSEN MO,ERIC C, 6025 KENWOOD, KANSAS CITY, 64110
COBB MO,JEANNINE M, 1720 PARK PL, WICHITA, 67203
COCHRAN MO,KEVIN S, KUMC 39TH & RAINBOW, KANSAS CITY, 66103
CRENSHAW MO,REBECCA S, 39TH & RAINBOW NEURO DEPT, KANSAS CITY, 66103
CRISP-LN0GREN MO,NAOMA, 820 N BELMONT, WICHITA, 6720B
OE WITT MD,BARBARA L, 2913 EATON, KANSAS CITY, 66103
OEGNER MO,REX A, 400B ADAMS, KANSAS CITY, 66103
OEV0SS MO,MARK R, 5418 PLAZA LN, WICHITA, 6720B
OILLARO MO,SANDY R, 929 N ST FRANCIS ANES DEPT, WICHITA, 67214
OANE MO,JOHN F, 6747 PAR LANE APT 704, WICHITA, 67212
OONNELLY MO,WILLIAM P, 7000 W 121ST, SHAWNEE MISSION, 00000
O0UBEK MO,OEBBIE L, 16109 W 82ND PL, SHAWNEE MISSION, 66219
OUGAN MO,0AVIO L, 11204 E OSIE, WICHITA, 67207
OYE MO,JAMES D, 1131 S CLIFTON, WICHITA, 6721B
ECK MO,MARIE M, 2444 MCLEAN, WICHITA, 67204
EDMON0S MO,MARTA J, 4620 W 72ND, SHAWNEE MISSION, 6620B
EDWARDS MO,SHELLEY J, 3920 B00TH, KANSAS CITY, 66103
ELCLOCK MO,0AVIO G, 351B W B3RO APT 212, SHAWNEE MISSION, 6620B
ENGELBRECHT MO,DIANE E, KUMC 39TH & RAINBOW, KANSAS CITY, 66103
ENGEN MO,PHIL L, 202B CHESTER, KANSAS CITY, 66103
ENSROTH MO,KENNETH A, PO BOX 829, TOPEKA, 66601
EROWTEN MO,8ARBARA A, 111 S TOPEKA, EL 00RA00, 67042
EWING MO,DAVID L, 39TH & RAINBOW NEURO DEPT, KANSAS CITY, 66103
FAILING MO,TRENT L, 527 PERSIMMON OR, OLATHE, 66061
FAST MO,GARY A, 3B21 WESTLAWN, WICHITA, 67203
FEAGINS ALEXANDER MO,SHIRLEY J, PO BOX 781601, WICHITA, 6727B
FELTS MO,ARTHUR D, 5143 MISSION RO, SHAWNEE MISSION, 66205
FERRARI MO,VICTOR S, 3560 RAINBOW #412, KANSAS CITY, 66103
FITZPATRICK HARRIS MO,PAMELA, 2910 W 46TH AVE, KANSAS CITY, 66103
FRANK MO,MARY S, 5840 SW CANOLETREE #11, TOPEKA, 66614
FRIEDMAN MO,0AVIO A, 6715 W 52ND PL, SHAWNEE MISSION, 66202
GABRIELLI JR MO,WILLIAM F, 6840 W 51ST TER #3C, SHAWNEE MISSION, 66202
GAYNES MO,STUART M, 2838 EATON, KANSAS CITY, 66103
GEENENS O.O.,00UGLAS L, 1811 CLEARVIEW CIR, TOPEKA, 66619
GILLETTE MD,DANIEL W, 1010 N KANSAS, WICHITA, 67214
GLOYER II MO,RICHARD M, 9144 ACOFF LANE, SHAWNEE MISSION, 66215
GOINS MO,80NNIE K, 9251 NIEMAN RD, SHAWNEE MISSION, 66214
GOLDSTEIN MO,ESTELLE T, 929 N ST FRANCIS, WICHITA, 67214
GRABAU MO,GUY M, 928 N RUTAN, WICHITA, 6720B
GRAESSLE DD,0ONNA M, 17216 W 67TH, SHAWNEE MISSION, 66216
GRAHAM JR MO,ARNOLD R, 429 W 1D, KANSAS CITY, 64105
GRANT MO,MICHAEL E, 7536 JUNIPER, SHAWNEE MISSION, 6620B
GREENWOOD MO,MELANIE A, 1131 S CLIFTON, WICHITA, 6721B
GRIFFIN MO,JOHN F, 39TH & RAINBOW, KANSAS CITY, 66103
GRIFFITT MO,WESLEY E, 4310 FRANCIS, KANSAS CITY, 66103
GRILLOT MD,MICHAEL B, 3511 ELMWOOD, WICHITA, 6721B
GRISSON MD,RHONDA G, 7724 W 97TH, SHAWNEE MISSION, 66212
GUPTA MO,GANESH G, 550 W CENTRAL #1513, WICHITA, 67203
HALL MO,GARY O, 5417 FOXRIDGE DR #103, SHAWNEE MISSION, 66202
HAMPEL MD,JEFF A, 1063 STRATFORD, WICHITA, 67206
HAMPEL MO,KEVIN G, 2739 S EXCHANGE, WICHITA, 67217
HARDING MO,SUSAN K, 1225 W 41ST #2W, KANSAS CITY, 64111
HARPER MO,DIANE M, 4412 W 94TH, SHAWNEE MISSION, 66207
HARRINGTON MO,ELAINE M, 5737 AYESBURY CIR, WICHITA, 67220
HARTY MO,JEAN R, 14604 W 91ST PL, SHAWNEE MISSION, 66215
HASLETT MD,MARK G, PD BOX 829, TOPEKA, 66601
HATCHER MO,ELIZABETH R, MENNINGER BOX 829, TOPEKA, 66601
HAVEKOST MD,MICHAEL C, 1131 S CLIFTON, WICHITA, 6721B
HAY MO,JAMES R, 2341 CAPRI LN, WICHITA, 67207
HEIN MD,DANIEL J, 213D E CRAWFORD STE 112, SALINA, 67401
HEIT MD,JOSEPH A, 6037 WOODSON RO, SHAWNEE MISSION, 66202
HENAYA MO,AMIR R, 4722 SOMERSET DR, SHAWNEE MISSION, 66207
HENSON MO,STEVEN R, 1010 N KANSAS, WICHITA, 67214
HDEHNE MD,TERRY G, 5214 JUNIPER, SHAWNEE MISSION, 66205
HOFFSDMMER MD,JEFFREY G, 1131 S CLIFTON, WICHITA, 6721B
H0N MO,DAVID E, 1010 N KANSAS, WICHITA, 67214
H0PP0CK MO,KEVIN C, 252 S DATTIN, WICHITA, 6721B
H0RTON MO,GREG A, 4105 ADAMS, KANSAS CITY, 66103
HOUGHTON MD,H0WARD L, K0MC 39TH & RAINBOW, KANSAS CITY, 66103
H0URIGAN MD, RICHARD J, 39TH & RAINBOW, KANSAS CITY, 66103
HRA8IK MO,BRENT A, 6206 CRAIG, SHAWNEE MISSION, 66202
HUGHES MO,00UGLAS W, 3127 S 49TH TER, KANSAS CITY, 66106
HUSER III MD,JOHN M, 1131 S CLIFTON, WICHITA, 6721B
JACKMAN MD,KAREN J, 1010 N KANSAS, WICHITA, 67214
JANTZEN MD,SARAH M, 1131 S CLIFTON, WICHITA, 6721B
JENSEN JR MD,JOHN T, 6510 E 29TH ST N #903, WICHITA, 67226
JOHNSON MD,DANIEL G, 4131 ADAMS, KANSAS CITY, 66103
JOHNSON MO,LIN0A M, 8905 MOHAWK LN, SHAWNEE MISSI0N, 66206
JOHNSON MO,PERRY J, 3056 FRANCIS #302, KANSAS CITY, 66103
JOHNSON MO,PHILIP L, 254 S MCCOMAS #2, WICHITA, 67203
JOHNSON MO,SCOTT S, B10 1/2 SPRAUL0ING, WICHITA, 67203
KALIN MO,CINDI A, 10605 W 61ST, SHAWNEE MISSION, 66203
KALIVAS MO,LIN0A L, 12300 PAWNEE LN, SHAWNEE MISSI0N, 66209
KAROATZKE MO,0AVIO S, 808 SPAUL0ING, WICHITA, 67203
KAUER MO,CURTIS D, 4174 CAMBRI0GE, KANSAS CITY, 66103
KEELER MO,BRAOFORO R, 3716 BELL #2, KANSAS CITY, 64111
KELLEY MO,CHRISTINE L, 929 N ST FRANCIS, WICHITA, 67214
KELLY MO,MICHELE, 831B REEO5 LANE, SHAWNEE MISSION, 66207
KENAGY MO,ROBERT S, 642 SYLVAN, WICHITA, 6721B
KENNEOY MO,MICHAEL L, 6023 W 54TH, SHAWNEE MISSION, 66202
KIMPLE MO,KRIS G, 2008 S ESTELLE, WICHITA, 67211
KING MD,BRADLEY S, 1114 S YALE, WICHITA, 6721B
K0HLER MO,LIN0A J, 39TH & RAINBOW, KANSAS CITY, 66103
K0ROON0WY MO,RAYMONO W, 1717 S 31ST #B, KANSAS CITY, 66106
K0RTJE MO,0AVIO K, 1131 S CLIFTON, WICHITA, 6721B
KOWALSKI MO,PETER C, 1351 SW CAMPBELL, TOPEKA, 66604
LABHSETWAR MO,SUMEOHA A, PO BOX 1005, JUNCTION CITY, 66441
LAUERT MD,SUSAN E, 1330 NW 82ND #4-032, KANSAS CITY, 64118
LAWHORN MO,CHARLTON O, 2739 S 45TH TERR, KANSAS CITY, 66106
LEAR MO,REX V, 1010 N KANSAS, WICHITA, 67214
LEMKE MD,LUKE P, 1131 S CLIFTON, WICHITA, 6721B
LICHTY MD,0AN M, 1721 S CYPRESS, WICHITA, 67207
LORTZ MO,PHILIP W, 1331 S PERSHING #V, WICHITA, 6721B
LUBETICH JR MO,JOHN F, 15541 W B1ST, SHAWNEE MISSI0N, 66219
LUNBERRY MO,JULIA J, 5402 W EDMINSTER, WICHITA, 67212
MAORIGAL MO,MARILU, 28D1 N ROCK RO #2204, WICHITA, 67226
MALONE MO,DAVID G, 5102 WALMER, SHAWNEE MISSION, 66204
MANSUR MD,LISA I, 2521 S KANSAS, WICHITA, 67216
MARTINSON MO,EDWARD E, KUMC - REHAB 39TH & RAINBOW, KANSAS CITY, 66103
HAVEC MO,JAMES A, 4467 BOOTH, KANSAS CITY, 66103
MCANELY MO,ROBERT O, KUMC 39TH & RAINBOW, KANSAS CITY, 66103
MCGINNIS MO,MICHAEL D, 1131 S CLIFTON, WICHITA, 6721B
MCGOURA III MO,FRANCIS J, 1131 S CLIFTON, WICHITA, 6721B
MCKITTRICK MO,RICHARD, 5544 CHADWICK, SHAWNEE MISSION, 66205
MEOLER MO,ROBERT G, 3605 E LEWIS, WICHITA, 6721B
MEIER MO,MITCHELL S, 550 N HILLS0IE, WICHITA, 67214
MELHAM MO,THOMAS J, 1109 S PAIGE #301, WICHITA, 67207
MENNINGER MO,BRENT O, 4147 CAM8RIDGE, KANSAS CITY, 66103
MEYER MO,MARK C, 3162 WOODVIEW RIDGE DR APT 102, KANSAS CITY, 66103
MILLER MO,KEVIN E, 7411 E 18TH, WICHITA, 67206
MILLS MO,CRAIG G, 2007 FEDERAL, KANSAS CITY, 66103
MITCHELL MO,SUE M, 1019 W 38TH, KANSAS CITY, 64111
MDOELL MO,ELLEN M, 5210 W 69TH, SHAWNEE MISSION, 66208
MONTERO JR MO,CARLOS, 3125 WYAN00TTE CIR APT C, KANSAS CITY, 66106
MONTGOMERY MO,SCOTT A, 530 W 12TH ST #205, KANSAS CITY, 64105
MORGAN MO,MITCH A, 1330 N PERRY #3, WICHITA, 67204
MUELLER MO,MICHAEL A, 6510 E 29TH ST N #8D3, WICHITA, 67226
MULLINS MO,JOHN R, 5513 S MEAO, WICHITA, 67216
MURPHY MO,WILLIAM R, 7945 FALMOUTH, SHAWNEE MISSION, 6620B
NASH MO,CYNTHIA I, 1131 S CLIFTON, WICHITA, 6721B
NEARY MO,JANE M, 9409 ROBINSON, SHAWNEE MISSION, 66212
NELSON MO,MARIAN K, 120 W MINNEAPOLIS, SALINA, 67401
NEUBAUER MO,MARCUS A, 4907 BROA0MODR #94, SHAWNEE MISSION, 66202
NEWMAN MO,MARK A, 9426 LONGLAKE, WICHITA, 67207
NICHOLS MO,JON C, 5107 OUTLOOK, SHAWNEE MISSION, 66202
NIEMAN MD,JOHN L, 9801 JUNIPER LANE, SHAWNEE MISSION, 66207
NIGH MO,STEPHEN S, 47DD W 66TH, SHAWNEE MISSION, 6620B
NDLLA MD,LORAIN E, 246 N HDLYKE ST, WICHITA, 6720B
O'NEILL MD,ERIC F, 929 N ST FRANCIS, WICHITA, 67214
OLIVE JR MD,ROBERT J, 929 N ST FRANCIS, WICHITA, 67214
OLSEN MO,TIMOTHY W, 4134 EATON APT #1, KANSAS CITY, 66103
OTTINGER MD,CHRISTOPHER M, 5413 FOXRIDGE OR APT #303, SHAWNEE MISSION, 66202
DWENS JR MD,WILLIAM S, 5112 W 11TH TERR, SHAWNEE MISSION, 66211
PADILLA MD,CAROL E, PD BOX 829, TOPEKA, 66601
PARKER MO,JOLIE J, MENNINGER BOX 829, TOPEKA, 66601
PARKS MO,JON C, 534 S PERSHING ST, WICHITA, 6721B
PATRON MO,RICARDO F, K0MC 39TH & RAINBOW, KANSAS CITY, 66103
PAULS MD,0AVIO G, 2728 W 17TH, WICHITA, 67203
PAULS MD,SCOTT W, 3123 WYANDOTTE CIR #D, KANSAS CITY, 66106
PENNINGTON MO,PHILIP A, 39TH & RAINBOW, KANSAS CITY, 66103
PERSONS MO,DIANE L, 10D2 W 78TH, KANSAS CITY, 64114
PETERS MD,TIMOTHY R, 3600 E HARRY, WICHITA, 6721B
PETERSON MD,STEPHEN E, MENNINGER PD BOX 929, TOPEKA, 66601
PICARD MD,THOMAS H, 80X 829, TOPEKA, 66601
PINKHAM MD,CHRIS M, 18D2 W 41ST #1W, KANSAS CITY, 64111
PLDMB MD,RENNE L, 4400 ADAMS, KANSAS CITY, 66103
PD0REBARAC MD,FRANCIS A, 1010 N KANSAS, WICHITA, 67214
POLASEK MD,CARLA L, PO BOX 829, TOPEKA, 66601
PORTER MO,SCOTT W, 2029 N WOODLAWN ST #92D, WICHITA, 6720B
PD0LDSE MD,ANIL K, 1216 SANTA FE, LEAVENWORTH, 66048
QASIM MD,YASMIN F, 7714 E 24TH CT, WICHITA, 67226
REDDY MD,BEENA M, 7329 OXFORD CT, WICHITA, 67226
REGISTER JR MD,G ASHLEY, 1131 S CLIFTON, WICHITA, 6721B
REICHENBERGER MD,RONALD J, 5D1 S SUMMIT LAWN, WICHITA, 67209
REISWIG MD,GARY W, 550 HIMS #428, WICHITA, 67203
RENNER MD,PATRICK A, 57D9 BIRCH, SHAWNEE MISSION, 66205
REUSSER MO,LAYNE M, 3425 E ENGLISH STE 20B, WICHITA, 6721B
RICE MD,RANDALL B, 10314 N HILLSIDE RR I BOX 107, VALLEY CENTER, 67147
RICKE MD,GREGORY A, 252D FERN, WICHITA, 67217
RIEG MD,KEVIN P, 3720 SLEEPY H0DLOW, WICHITA, 6720B
R0PP MD,JAMES C, 4845 H0RTON, SHAWNEE MISSION, 66202
RUPP MD,JENNIFER A, 3737 N RUSHWOOD STE 12D5, WICHITA, 67226
RYAN JR MD,RAYMOND J, 929 N ST FRANCIS, WICHITA, 67214
SACK MD,JOSEPH M, 17D4 W 32ND NORTH, WICHITA, 67204
SANDNESS MO,KATHLEEN M, 252D W 46TH, KANSAS CITY, 66103
SCHLOESSER MD,ANNE C, 1914 WARNER CT, TOPEKA, 66604
SCHMIDT MD,MARTY L, 3023 W MAPLE, WICHITA, 67213

SCHNEIDER MD, SCOTT A, 1010 N KANSAS, WICHITA, 67214
 SCHOWENGERDT MO, ANDREW W, 3934 800TH APT 1, KANSAS CITY, 66103
 SCHOWENGERDT MO, DANIEL B, 1131 S CLIFTON, WICHITA, 67218
 SCHROFF MD, GREGORY P, 3715 CAMBRIDGE, KANSAS CITY, 66103
 SCHWERTFEGER MO, TY L, 1055 S CLIFTON, WICHITA, 67218
 SEGRAVES MD, STEVEN O, 7800 GLENWOOD, SHAWNEE MISSION, 66204
 SHELL MO, JOHN R, 4438 GENESSEE, KANSAS CITY, 64111
 SHERARO MO, SARAH L, 7007 W 66TH TERR, SHAWNEE MISSION, 66202
 SHERBON MO, MARY LOU, 1010 N KANSAS, WICHITA, 67214
 SIEG MD, KARL G, 12376 W 82ND PL, SHAWNEE MISSION, 66215
 SIEMENS MO, CHARLOTTE A, SSO W CENTRAL #1406, WICHITA, 67203
 SIMONY-SOLOFSKY MD, M ANN, 5020 SOUTHRIDGE, SHAWNEE MISSION, 66205
 SIMS MO, PETER MORRIS, 4521 SW WANAMAKER RD, TOPEKA, 66610
 SMITH MO, AMY SCAMMAN, 3820 800TH APT 9, KANSAS CITY, 66103
 SMITH MO, MICHAEL L, 1001 S CYPRESS, WICHITA, 67207
 SPERRY MO, ROBERT E, KUMC 39TH & RAINBOW, KANSAS CITY, 66103
 SPRINGER MD, MARK J, 143 N ARCAOIA, WICHITA, 67212
 STASS-ISERN MD, MERRILL, 4601 ORVILLE STE 12, KANSAS CITY, 66102
 STEPHANZ JR MO, GERALD B, 1100 RIVERSIDE, WICHITA, 67203
 STEPHENS MO, SAMUEL T, 411 W ASH, MINEOLA, 67865
 STEWART MO, DANIEL L, SSO N HILLSIDE, WICHITA, 67214
 STEWART MO, TOM O, 1131 S CLIFTON, WICHITA, 67218
 STIGGE MO, KEVIN W, 7416 E 17TH N, WICHITA, 67205
 STOCKTON O O, MICHAEL A, 5800 SW 6TH, TOPEKA, 66601
 STURGEON MD, JOHN B, 7800 MOHAWK, SHAWNEE MISSION, 66208
 TACKETT MO, ROBERT J, 6111 OAKWOOD, WICHITA, 67208
 TALBERT MO, TIMOTHY C, 1621 S YALE, WICHITA, 67218

THDRNTON III MO, FOXHALL P, 12305 S DARNELL, OLATHE, 66062
 TIPTON MD, KYLE M, 1308 CROWLEY, WICHITA, 67216
 TRUONG O O, THANH N, 2552 N FOXRUN CT, WICHITA, 67226
 TURNER MD, ROBERT N, S424 EOMINISTER, WICHITA, 67212
 VAN DE VEER MD, SCOTT M, 4104 ADAMS, KANSAS CITY, 66103
 VANOIVORT MD, DANIEL L, 4127 800TH, KANSAS CITY, 66103
 VANVELOHUIZEN MD, PETER J, 6885 W S1ST TERR #10, SHAWNEE MISSION, 66202
 VASUDEVAN MO, GOPI, S742 AYESBURY CIR, WICHITA, 67220
 VORAN MO, DAVID A, B629 RILEY, SHAWNEE MISSION, 66212
 WALLACE O O, RICHARD B, 1010 N KANSAS, WICHITA, 67214
 WAXMAN MD, STEVE, 2604 W 45TH AVE, KANSAS CITY, 66103
 WEINER MD, GARY B, 10738 GLENWOOD #E, SHAWNEE MISSION, 66211
 WEISHAAR MO, PAUL O, 2259 S TERRACE, WICHITA, 67218
 WEROER O O, STEVEN F, 1010 N KANSAS, WICHITA, 67214
 WETZEL MD, ORVILLE R, 2330 N OLIVER APT 220, WICHITA, 67220
 WHEELER MD, ALICE T, 1116 N CARLOS, WICHITA, 67203
 WIENS MD, JONATHAN G, 7746 BIRCH, SHAWNEE MISSION, 66208
 WIENS MO, LYNN A, 8814 WAYNE, KANSAS CITY, 64131
 WILLIAMS MO, WADE L, S406 W 79TH TERR, SHAWNEE MISSION, 66208
 WILSON MD, J WELLS, S50 N HILLSIDE, WICHITA, 67214
 WILSON MO, LORI J, S441 FOXRIDGE DR #201, SHAWNEE MISSION, 66202
 WONG MD, GEORGE F, 11 W 66TH, KANSAS CITY, 64113
 WRIGHT III MO, GILL C, KUMC 39TH & RAINBOW, KANSAS CITY, 66103
 WRIGHT MO, CHRISTOPHER O, 1131 S CLIFTON, WICHITA, 67218
 YOO MD, GEORGE H, S710 SW 31ST TERR, TOPEKA, 66614

Medical Student Section

AHUJA,KIRAN S, 12310 OVERBROOK CT, SHAWNEE MISSION, 66209
ALLMAN,LORI R, 9026 W 64TH PL #301, SHAWNEE MISSION, 66202
AMIRANI,HOSSEIN, 8406 E HARRY ST #716, WICHITA, 67207
ANDERSON,DEBORAH A, 3030 FRANCIS #301, KANSAS CITY, 66103
ARGO,TANYA, 4209 W 48TH, SHAWNEE MISSION, 66205
ARYANPUR,DAVID, 4117 AOAMS #207, KANSAS CITY, 66103
AUSTIN,CRAIG T, 5031 CANTERBURY, SHAWNEE MISSION, 66205
BABEL,DOUGLAS B, 2118 BRISTOW AVE, KANSAS CITY, 66103
BAKER,TRACY M, 3838 RAINBOW BLVD #507, KANSAS CITY, 66103
BAMBINI,DAVID A, 5100 FOXRIDGE #512, SHAWNEE MISSION, 66202
BANTRUP,GREGORY W, 550 W CENTRAL 1407, WICHITA, 67203
BANWART,JON C, 5023 60TH TER, SHAWNEE MISSION, 66205
BEGGS,DAVID A, 11900 WILLOW LN #321, SHAWNEE MISSION, 66213
BENJAMIN,ASHLEY B, 2612 STRATFORD RD, LAWRENCE, 66049
BEY,LOVIE O, 6800 E 99TH TERR, KANSAS CITY, 64134
BILLINGS,BRIAN M, 4141 EATON, KANSAS CITY, 66103
BITTER,CINCY C, 3838 RAINBOW APT 502, KANSAS CITY, 66103
BLAKE,KATHLEEN M, 4155 EATON, KANSAS CITY, 66103
BORROR,CHERYL, 400 W CENTRAL STE 2910, WICHITA, 67203
BOYCE,MARY C, 6801 PAR LANE APT #1112, WICHITA, 67212
BRAOLEY,KENT R, 1709 PARK PL #2, WICHITA, 67203
BRADY,MARK O, 513 E MARION RD #211, WICHITA, 67216
BRECHTSEN,NANCY L, 4419 EATON, KANSAS CITY, 66103
BREWER,SUSAN J, 3520 RAINBOW BLVD #723, KANSAS CITY, 66103
BRITTAN,ANDREW M, 4417 W 70TH TERR, SHAWNEE MISSION, 66208
BROOKS,PAUL, 3824 BOOTH #10, KANSAS CITY, 66103
BRUNNER,CHRIS N, 7750 E 32ND ST N APT 507, WICHITA, 67226
BURCH,CINCY M, 4310 W B2ND TERR, SHAWNEE MISSION, 66208
BURGETT,PAUL M, 3838 RAINBOW BLVD APT 301, KANSAS CITY, 66103
BURNS,LISA A, 11539 HAWLEY, SHAWNEE MISSION, 66210
BUSHELL,KRISTEN, 4205 BOOTH, KANSAS CITY, 66103
CALLAGHAN,EDWARD J, 1848 S 32ND, KANSAS CITY, 66106
CAMERON,JEFF W, 2417 S 24TH ST APT 8203, KANSAS CITY, 66106
CAMPBELL,ELIZABETH A, 7917 ROSEWOOD, SHAWNEE MISSION, 66208
CARPINO,STEPHANIE J, 5926 WOODSON RD #301, SHAWNEE MISSION, 66202
CARVER,RONALD C, 3924 RAINBOW BLVD, KANSAS CITY, 66103
CASIOY,SHANNON L, 10867 RICHARDS CT, SHAWNEE MISSION, 66210
CASTRISOS,JAMES C, 3808 BOOTH #6, KANSAS CITY, 66103
CATTANEO,JOHN E, 3120 WOODVIEW RIDGE OR #102, KANSAS CITY, 66103
CHANG,CRAIG G, 3824 BOOTH #1, KANSAS CITY, 66103
CHANG,MORRIS, 1450 WILLOWBEND CIR, WICHITA, 67230
CHO,STEVE Y, 2323 N WOODLAWN #207, WICHITA, 67220
CHRISTIAN,MARY K, 437 S CRESTWAY, WICHITA, 67218
CLOUGH,JOHN A, 1704 W 41ST ST, KANSAS CITY, 64111
COCHRAN,KIMBERLY A, 16621 W 139TH APT 424, OLATHE, 66062
COHLIA,SAM N, 3824 BOOTH #12, KANSAS CITY, 66103
CONE,PATRICIA A, 1920 NEBRASKA AVE, KANSAS CITY, 66102
CONNELL,CHRISTINA Y, 400 W CENTRAL AVE STE 109, WICHITA, 67203
CORRELL,KELLEY M, 2330 N OLIVER APT 1211, WICHITA, 67220
COSTA,JOHN A, 10404 W 70TH TERR #204, SHAWNEE MISSION, 66203
COX,REAGAN M, 3580 RAINBOW BLVD #B11, KANSAS CITY, 66103
COX,STEVEN W, 3520 RAINBOW BLVD #727, KANSAS CITY, 66103
COYLE,DEBORAH S, 400 W CENTRAL #2917, WICHITA, 67203
CRAOOCK,TERRY M, 39TH & RAINBOW MED BOX 259, KANSAS CITY, 66103
CROSKELL,SARAH E, 4717 BOOTH, SHAWNEE MISSION, 66205
CROSS,KAREN K, 3838 RAINBOW #601, KANSAS CITY, 66103
DANIELS,PATRICIA M, 4503 FRANCIS ST, KANSAS CITY, 66103
DATTOL,FREDERICK, 12639 PAMNEE LANE, SHAWNEE MISSION, 66209
DE LA PEORAJA,JORGE L, 3550 RAINBOW #212, KANSAS CITY, 66103
DEFRECE,DAVID J, 6906 W SI #223, SHAWNEE MISSION, 66202
DEVINE,ROBERT P, 6834 LOCUST, KANSAS CITY, 64131
DICKINSON,JAMES M, 1305 N 40TH, KANSAS CITY, 64111
DOBARTZ,DAVID E, 3814 STATE LINE, KANSAS CITY, 66103
DOUGGINS,MAURICE L, 3921 BOOTH APT #4, KANSAS CITY, 66103
DURHAM,JANE, 4320 W 64TH, SHAWNEE MISSION, 66208
EY,DAIANA P, 4420 JARBOE #28, KANSAS CITY, 64111
ECKERT,CYNTHIA S, 3056 FRANCIS #202, KANSAS CITY, 66103
EDEL,THOMAS A, 1100 COUNTY LINE RD 7-9, KANSAS CITY, 66103
EDEL,THOMAS, 1100 COUNTY LINE RD #9, KANSAS CITY, 66103
EL-GHAZZAWY,ADEL G, 4127 THOMPSON #13, KANSAS CITY, 66103
ELLIS,STEVEN F, 6018 EL MONTE, SHAWNEE MISSION, 66205
ENOCH III,DAVID W, 1725 FAIRVIEW, WICHITA, 67203
EVANS,GENE H, 2954 FRANCIS #202, KANSAS CITY, 66103
FAKHOURY,MARK, 4411 FRANCIS, KANSAS CITY, 66103
FALTER,RICHARD T, 3580 RAINBOW BLVD #B27, KANSAS CITY, 66103
FAULK,L CHRISTINE, 4104 B AOAMS, KANSAS CITY, 66103
FERGUSON,DAVID M, 3540 RAINBOW BLVD #32S, KANSAS CITY, 66103
FIELD,CHARLES E, 3102 WOODVIEW RIDGE OR #20B, KANSAS CITY, 66103
FIKE,EDGAR A, 1100 COUNTY LINE #34-4, KANSAS CITY, 66103
FISHER,KAY, 3220 EATON, KANSAS CITY, 66103
FITZSIMMONS,CURTIS J, 3811 SPRINGFIELD #2B, KANSAS CITY, 66103
FRANK,KENNETH J, 8811 GALLERY ST, SHAWNEE MISSION, 66215
FREORICKSON,DAVID P, 4449 FRANCIS, KANSAS CITY, 66103
FREORICKSON,ERIC R, 2407 W 45TH AVE, KANSAS CITY, 66103
GARNER,WILLIAM J, 3560 RAINBOW #426, KANSAS CITY, 66103
GEMPERLI,AMY WISE, 2610 W 10S, SHAWNEE MISSION, 66206
GILLOGLY,MARILYN B, 4117 AOAMS #302, KANSAS CITY, 66103
GLEASON,DOUGLASS S, 3806 STATE LINE, KANSAS CITY, 66103
GLOSTEIN,JOYCE, 12062 WOOD, SHAWNEE MISSION, 66213
GONZALEZ,IRIS P, 3629 STATE LINE, KANSAS CITY, 64111
GRACE,CAROL, 6218 ROBINSON #4, SHAWNEE MISSION, 66202
GRAHAM,JOHN O, 1624 S MISSION, WICHITA, 67207
GRANTHAM,J AARON, 6615 W 69, SHAWNEE MISSION, 66204
GRATNY,LINDA L, RR 3 BOX S13, LEAVENWORTH, 66048
GRAY,APRIL K, 3634 WYOMING 2C, KANSAS CITY, 64111
GREEN,BART P, 3838 RAINBOW APT 505, KANSAS CITY, 66103
GROSSER,DAVID M, 3909 BOOTH #9, KANSAS CITY, 66103
GUILLAUME,CAROLE A, 4310 FRANCIS, KANSAS CITY, 66103
GUPTA,ARCHANA, 2330 N OLIVER #1211, WICHITA, 67220
HALVORSON BEESLEY,KARI J, 101 N JANELL, OLATHE, 66061-1750
HAMILTON,DEBORAH K, 1770 S ROCK RD #912, WICHITA, 67207
HANNA,DEBRA S, 3550 RAINBOW BLVD APT 116, KANSAS CITY, 66103

HANNAH,ANNE B, 104 NE 50TH CT #922, KANSAS CITY, 64118
HAROLD,DAVID W, 2311 MARTY APT 1, KANSAS CITY, 66103
HARRISON,PAMELA O, 2520 W 46TH, KANSAS CITY, 66103
HARROO,C GORDON, 2605 ESSEX, KANSAS CITY, 66103
HASWELL,JAMES, 1927 FEDERAL, KANSAS CITY, 66103
HATTAMER,STEVEN, 7809 W 60 TERR, SHAWNEE MISSION, 66202
HEAD,DAVID E, 3550 RAINBOW #717, KANSAS CITY, 66103
HEEB,JON J, 3804 BOOTH #B, KANSAS CITY, 66103
HENRY,JEFFREY, 3808 BOOTH #12, KANSAS CITY, 66103
HENSEL JR,JOHN M, 4630 PENNSYLVANIA APT 2 SOUTH, KANSAS CITY, 64112
HENSON,CHRISTOPHER E, 3804 BELL, KANSAS CITY, 64111
HENZLER,DAVID, 1776 S 32ND, KANSAS CITY, 66106
HERNANDEZ,LISA M, 3520 RAINBOW, KANSAS CITY, 66103
HIGHTIGHT,JAMES E, 2213 W 79TH TERR, SHAWNEE MISSION, 66208
HILLER,JOHN F, MED STU BOX 310 39TH & RAINBOW, KANSAS CITY, 66103
HILTON,KEVIN R, 4809 WOOD OR, SHAWNEE MISSION, 66203
HINSHAW,DAVID J, 2613 ESSEX, KANSAS CITY, 66103
HINTON,DAVID, 3560 RAINBOW #407, KANSAS CITY, 66103
HUNT,DAVID A, 3924 RAINBOW BLVD, KANSAS CITY, 66103
HUBERT,KORY, 3530 RAINBOW APT S14, KANSAS CITY, 66103
ISAAC,STEVEN R, 4934 E FUNSTON, WICHITA, 67218
ISNARD,DAVID M, 8511 W 69TH ST, SHAWNEE MISSION, 66204
JACKSON,MICHAEL R, 2906 W 42ND AVE, KANSAS CITY, 66103
JACKSON,ROBERT, 4510 JC NICHOLS PKWY, KANSAS CITY, 64111
JACOBSON,ERIC, 1823 S 32, KANSAS CITY, 66106
JATA,MARY A, 3520 RAINBOW #721, KANSAS CITY, 66103
JOACHIMS,BRIAN V, 3030 FRANCIS APT 302, KANSAS CITY, 66103
JOHNSON,BRIAN A, 3808 BOOTH APT 9, KANSAS CITY, 66103
JOHNSON,DARRY S, 935 S LEXINGTON, WICHITA, 67218
JOHNSTON,VINCENT B, 4808 MISSION RD, SHAWNEE MISSION, 66205
JONES,DAVID K, 123 W ARMOUR BLVD, KANSAS CITY, 64111
JUDD,KATHLEEN M, 7915 FALMOUTH, SHAWNEE MISSION, 66208
KASPER,MICHAEL L, 3630 BELL, KANSAS CITY, 64111
KAUFFMAN,KURT A, 3916 SPRINGFIELD ST, KANSAS CITY, 66103
KAUFMAN,LEONARD, 3838 RAINBOW #304, KANSAS CITY, 66103
KEEVER,CRAIG E, 4745 FALMOUTH, SHAWNEE MISSION, 66205
KERBY,GWYNOLYN S, 3570 RAINBOW APT 611, KANSAS CITY, 66103
KHOURY,DAVID J, 3806 STATE LINE RD, KANSAS CITY, 66103
KILE,KAY A, 2525 W 38TH APT O, KANSAS CITY, 66103
KITCHENS,TAMMY L, 4145 WYOMING, KANSAS CITY, 64111
KLOSTER,DAVID R, 3108 WOODVIEW RIDGE OR #303, KANSAS CITY, 66103
KNIB,TIMOTHY G, 2525 W 38 #1-A, KANSAS CITY, 66103
KNOX,DOUGLAS B, 7833 BIRCH, SHAWNEE MISSION, 66208
KNUSTON,JOHN O, 1908 BARBER, KANSAS CITY, 66103
KOEHLER,LESLIE M, 3821 SPRINGFIELD #2C, KANSAS CITY, 66103
KOHLE,ULRIKE B, 4207 W 54TH TERR, SHAWNEE MISSION, 66205
KORBER,DAVID E, 3921 BOOTH APT 8, KANSAS CITY, 66103
KOSTER,KIM R, 5525 HORTON, SHAWNEE MISSION, 66202
KUETHER,DAVID A, 3703 EATON, KANSAS CITY, 66103
KWAPISZESKI,BRAOLEY R, 3220 W 43 AVE, KANSAS CITY, 66103
LAI,JOHN O, 400 W CENTRAL ST #607, WICHITA, 67203
LAMBERT,JACQUI I, 3044 FRANCIS APT 301, KANSAS CITY, 66103
LANDAUER,KYLE H, 3838 RAINBOW #140B, KANSAS CITY, 66103
LARREA,PABLO J, 3838 RAINBOW BLVD APT 1210, KANSAS CITY, 66103
LARSON,MELISSA L, 8879 JUNIPER LN, SHAWNEE MISSION, 66207
LAWS,NANCY J, 3820 BOOTH #11, KANSAS CITY, 66103
LEESON,MICHAEL C, 7810 RILEY ST #1027, SHAWNEE MISSION, 66204
LEHR,CARRIE WOODS, 4171 FRANCIS, KANSAS CITY, 66103
LIU,PENNY, 3812 BOOTH #S, KANSAS CITY, 66103
LOCKE,KELLY T, 3838 RAINBOW #40S, KANSAS CITY, 66103
LOGAN,DAVID L, 3226 COUNTRY CLUB, WICHITA, 67208
LOPEZ,MARK O, 4338 MISSION RD APT 2, KANSAS CITY, 66103
LOPEZ,RUBEN J, 4338 MISSION RD APT 2, KANSAS CITY, 66103
LORENZETTI,LISA A, 3602 RAINBOW BLVD #306, KANSAS CITY, 66103
LUNOAK,BRUCE E, 3560 RAINBOW BLVD #403, KANSAS CITY, 66103
LYNCH,GREGORY P, 1305 W 40TH, KANSAS CITY, 64111
MACARIAN,FRANCIS A, 11511 FLOYD OR #4207, SHAWNEE MISSION, 66210
MACE,RHONDA O, 3838 RAINBOW BLVD APT 90S, KANSAS CITY, 66103
MARQUETTE,RAY J, 3838 RAINBOW BLVD APT 803, KANSAS CITY, 66103
MARSO,STEVE P, 4930 GLENWOOD #5, SHAWNEE MISSION, 66202
MASSIER,KIM M, 8501 REOBUE LN, SHAWNEE MISSION, 66220
MATTHEW,BRIAN, 3838 RAINBOW #711, KANSAS CITY, 66103
MAY,LANCE A, 2134 BRISTOW, KANSAS CITY, 66103
MAYS,KEVIN P, 9431 RUSSELL, SHAWNEE MISSION, 66212
MCATEE,JAMES R, 2922 FRANCIS #202, KANSAS CITY, 66103
MCCAULEY,ROBERT L, 1891 S 32 #A, KANSAS CITY, 66106
MEEKS, MARK A, 2404 W 38TH APT 3, KANSAS CITY, 66103
MEIER,MICHAEL M, 2000 CHESTER, KANSAS CITY, 66103
MERRITT,GREGORY A, 8815 HAWLEY, SHAWNEE MISSION, 66212
MEYER,ANGELA M, 3907 AOAMS, KANSAS CITY, 66103
MILES,WILLIAM S, 6325 W 73RD TERR, SHAWNEE MISSION, 66204
MIMIAGA,ANNE T, 711 CHURCH TERR, OLATHE, 66031
MORALES JR,OSCAR, 2737 S 72ND, KANSAS CITY, 66106
MOREANO,PHILLIP A., 3580 RAINBOW #827, KANSAS CITY, 66103
MORRIS,JENNIFER A, 3580 RAINBOW BLVD, KANSAS CITY, 66103
MOSSINGHOFF,DEBORAH GRIESER, 2300 W 129TH, SHAWNEE MISSION, 66209
MULLENBURG,JEFFREY, 3905 SPRINGFIELD, KANSAS CITY, 66103
MULLIGAN,LINDA L, 9021 WOOD, SHAWNEE MISSION, 66212
MURPHY,TRACY O, 4372 MISSION RD #S, KANSAS CITY, 66103
NASSERI,KEVIN K, 3838 RAINBOW BLVD #20S, KANSAS CITY, 66103
NEHORAYAN,MARC L, 3550 RAINBOW APT 113, KANSAS CITY, 66103
NELSON,TAMMIE L, 16116 W 154TH, OLATHE, 66062
NEUBAUER,JOHN P, 3838 RAINBOW #702, KANSAS CITY, 66103
NOLA,BOUNSAVATH, 2908 W 43 TER #A, KANSAS CITY, 66103
NUNLEY,PIERCE O, 3921 BELL, KANSAS CITY, 64111
OLSON,INGER L, 1217 RICHMOND, WICHITA, 67203
ORTH,GREGORY, 912 N SHERIDAN, WICHITA, 67203
PARRISH JR,DAVID L, 10214 W 80TH #326, SHAWNEE MISSION, 66204
PARSA,MICHAEL B, 550 W CENTRAL AVE #1407, WICHITA, 67203
PATRON,ROBERT R, 3814 STATE LINE, KANSAS CITY, 66103
PETERSEN,MARK I, RT 1 BOX 384 E, BONNER SPRING, 66012
PETTAVEL,PAUL P, 9570-B W 86TH ST, SHAWNEE MISSION, 66212

PFEIFER II, F MICHAEL, 2217 W 39TH #1, KANSAS CITY, 66103
 PFEIFFER, BRIAN O, 3600 RAINBOW APT 312, KANSAS CITY, 66103
 POOREBARAC, PIERRE, 3838 RAINBOW APT SOS, KANSAS CITY, 66103
 PRESCOTT, JAMES T, 2117 S TERRACE OR, WICHITA, 67218
 PURKIS, MICHAEL D, 4117 AOAMS ST #103, KANSAS CITY, 66103
 RAINS, JEFFREY, 2917 W 44TH AVE, KANSAS CITY, 66103
 RANKIN, KRISTIN, 3570 RAINBOW APT 611, KANSAS CITY, 66103
 REGEHR, RANDALL S, 5210 W 71 TER, SHAWNEE MISSION, 66208
 RETTELE, GARRICK A, 373S BOOTH APT #4, KANSAS CITY, 66103
 RHODE, MICHAEL G, 7011 SHERIAC CR #104, WICHITA, 67209
 RISENHOOVER, EDDIE D, S300 ROE AVE, SHAWNEE MISSION, 66205
 ROMEREIM, MARK E, 124 AARON, WICHITA, 67002
 ROMERO JR, FRANK, 2954 FRANICS #304, KANSAS CITY, 66103
 ROSADO, ANTONIO, 4372 MISSION RD, KANSAS CITY, 66103
 RUCKER, MARK R, 4146 STATE LINE, KANSAS CITY, 66103
 SCANLAN, MARK R, 1001 N LIGHTNER, WICHITA, 67208
 SCHEFFER, RUSSELL E, S717 NW OREGON RD, KANSAS CITY, 641S1
 SCHULZ, THOMAS K, S700 E MAINSGATE #60S, WICHITA, 67220
 SCHWERTFEGGER, KELSH, DEBRA J, KUMC 39TH & RAINBOW, KANSAS CITY, 66103
 SCOTTEN, MITZI S, 6027 METCALF LN 1B, SHAWNEE MISSION, 66202
 SEEGER, AMY O, 391S BOOTH #8, KANSAS CITY, 66103
 SEHDEV, PAUL S, 2217 W 39TH #2, KANSAS CITY, 66103
 SEIBEL, BRENT E, 3838 RAINBOW BLVD #40S, KANSAS CITY, 66103
 SEITZ, RICHARD F, 1919 OLATHE BLVD APT 202, KANSAS CITY, 66103
 SELIGSON, MICHAEL S, 10036 HARDY DR, SHAWNEE MISSION, 66212
 SHAH, ARJAV A, 4216 BELL, KANSAS CITY, 64111
 SHARP, CHAD E, 7650 E 32ND ST N APT 308, WICHITA, 67226
 SHAW, JOHN W, 3570 RAINBOW BLVD #613, KANSAS CITY, 66103
 SILER, JAMES, 2032 N KESSLER ST, WICHITA, 67203
 SIMMONS, MARK S, 6632 HALSEY, SHAWNEE MISSION, 66216
 SIMMONS, MICHAEL R, 6632 FLOYD, SHAWNEE MISSION, 66202
 SINGH, RAHUL P, 3540 RAINBOW #314, KANSAS CITY, 66103
 SINN, KRISTINA J, 400 W CENTRAL #210S, WICHITA, 67203
 SLAGLE, GENELLE J, 6643 WOODSON, SHAWNEE MISSION, 66202
 SMITH, ANN IRVING K, 800 E NORTHVIEW, OLATHE, 66061
 SMITH, JACQUELINE, 7817 W 99TH, SHAWNEE MISSION, 66212
 SONTHEIMER, DANIEL L, 2520 W 39TH APT 1A, KANSAS CITY, 66103
 SPIELOOCH, RISA L, 252S W 38TH AVE #2B, KANSAS CITY, 66103
 STANGA, JAMES, 400 W CENTRAL AVE #212, WICHITA, 67203
 STURGIS, CHARLES O, 400 W CENTRAL #713, WICHITA, 67203
 SUERO, JAMES A, 3570 RAINBOW BLVD #626, KANSAS CITY, 66103

SULLIVAN, JEANETTE, RR 1 BOX 18SE, EASTON, 66020
 SUMPTER, MATTHEW T, S222 CATALINA, SHAWNEE MISSION, 66205
 SWIFT, TIMOTHY J, 4146 STATE LINE, KANSAS CITY, 66103
 TAKAHASHI, AYAME, 3737 EATON, KANSAS CITY, 66103
 TAWAOROS, HANAN K, 3838 RAINBOW #S04, KANSAS CITY, 66103
 TAYLOR, BRADLEY J, 130S W 40TH, KANSAS CITY, 64111
 THAI, VINH Q, 3921 BOOTH #6, KANSAS CITY, 66103
 THODE, JEFF L, 4148 BOOTH PL, KANSAS CITY, 66103
 THOMAS, RYAN M, 8128 WALMER ST, SHAWNEE MISSION, 66204
 THOMAS, STANLEY M, 6202 ROBINSON #4, SHAWNEE MISSION, 66202
 THOMPSON, CURT, 3139 S 49TH TERR, KANSAS CITY, 66106
 THOMPSON, PH GORON, 550 NIMS ST #430, WICHITA, 67203
 TOPLIFF, CONNIE L, 3102 WOODVIEW RIDGE OR #206, KANSAS CITY, 66103
 TRYGG, KELLY A, 3838 RAINBOW #212, KANSAS CITY, 66103
 TURLEY, BRIAN R, 9227 LICHTENAUER OR #18, LENEXA, 66219
 UNDERWOOD, JOHN (JOHNSON IV), 3550 RAINBOW, KANSAS CITY, 66103
 VACCA, JOSEPH L, 4010 AOAMS, KANSAS CITY, 66103
 VANDERVEEN, OEBORAH K, B105 MONROVIA, SHAWNEE MISSION, 66215
 VATS, ATUL, 3838 RAINBOW #702, KANSAS CITY, 66103
 VEAL, M KATHRYN, 1489 COOLIDGE, WICHITA, 67203
 VENUTI, SUSAN E, 3S30 RAINBOW BLVD #526, KANSAS CITY, 66103
 VIERRA, ANTHONY R, 3570 RAINBOW #622, KANSAS CITY, 66103
 VIERRA, MICHAEL J, 3580 RAINBOW #822, KANSAS CITY, 66103
 VU, ANN L, 1826 S 32ND ST, KANSAS CITY, 66106
 VU, TRIEN B, 1826 S 32ND, KANSAS CITY, 66106
 WAHBEH, ANTHONY, 4319 EATON, KANSAS CITY, 66103
 WATKINS, DEAN O, 414S AOAMS, KANSAS CITY, 66103
 WESTFALL, JOHN M, 3332 E OAKLAND, WICHITA, 67218
 WICINA, GENON M, 3056 FRANCIS #202, KANSAS CITY, 66103
 WIEBE, ERIC, 610 N OLO MANOR, WICHITA, 67208
 WILFONG, OAVIO, 3520 RAINBOW BLVD #726, KANSAS CITY, 66103
 WILLCOX, JAMES A, 1240 N EMPORIA #3, WICHITA, 67214
 WILLIAMS, GARY G, 13102 W 88TH ST CT #10, SHAWNEE MISSION, 66215
 WILSON, MICHAEL A, 2922 FRANCIS, KANSAS CITY, 66103
 WOLF, CHRISTINE, 3602 RAINBOW BLVD #105, KANSAS CITY, 66103
 WOOD JR, ROBERT A, 3921 BOOTH APT 8, KANSAS CITY, 66103
 YANG, ALEXANDER Q, 2219 W 39TH AVE #2E, KANSAS CITY, 66103
 YOAKUM, PYLE, MARGARET, 7311 GREELEY, KANSAS CITY, 66109
 YOESL, MICHAEL, 14605 VILLAGE DR, OLATHE, 66062
 YOXALL, KELLY E, 3580 RAINBOW #824, KANSAS CITY, 66103
 ZUERCHER, PAUL S, 3828 BOOTH #11, KANSAS CITY, 66103



VASOTEC®

(ENALAPRIL MALEATE | MSD)

VASOTEC is available in 2.5-mg, 5-mg, 10-mg, and 20-mg tablet strengths.

Contraindications: VASOTEC® (Enalapril Maleate, MSO) is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor.

Warnings: **Angioedema:** Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Patients with heart failure given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy. (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in patients with heart failure), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, Drug Interactions and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: **General:** **Impaired Renal Function:** As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (>5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See Drug Interactions.)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness, especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. It is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methylglucoside, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, it is recommended that these agents be used cautiously because of demonstrated hyperkalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors. A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Pregnancy—Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters.

There are no adequate and well-controlled studies of enalapril in pregnant women. However, data are available that show enalapril crosses the human placenta. Because the risk of fetal toxicity with the use of ACE inhibitors has not

been clearly defined, VASOTEC® (Enalapril Maleate, MSO) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Postmarketing experience with all ACE inhibitors thus far suggests the following with regard to pregnancy outcome. Inadvertent exposure limited to the first trimester of pregnancy has not been reported to affect fetal outcome adversely. Fetal exposure during the second and third trimesters of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported, presumably representing decreased renal function in the fetus. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors, but it is not clear whether they are related to ACE inhibition, maternal hypertension, or the underlying prematurity.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of 14 C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

HYPERTENSION: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

HEART FAILURE: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Cardiac arrest; myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, Hypotension); pulmonary embolism and infarction; pulmonary edema; rhythm disturbances; atrial fibrillation; palpitation.

Digestive: Ileus, pancreatitis, hepatitis (hepatocellular or cholestatic jaundice), melena, anorexia, dyspepsia, constipation, glossitis, stomatitis, dry mouth.

Musculoskeletal: Muscle cramps.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION).

Respiratory: Bronchospasm, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection.

Skin: Exfoliative dermatitis, toxic epidermal necrolysis, Stevens-Johnson syndrome, herpes zoster, erythema multiforme, urticaria, pruritus, alopecia, flushing, hyperhidrosis.

Special Senses: Blurred vision, taste alteration, anosmia, tinnitus, conjunctivitis, dry eyes, tearing.

A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgias/arthritis, myalgias, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitivity, rash, and other dermatologic manifestations.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g% and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown): In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported. A few cases of hemolysis have been reported in patients with G6PD deficiency.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: **Hypertension:** In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance >30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤ 30 mL/min (serum creatinine ≥ 3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, Pharmacodynamics and Clinical Effects.) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Patients with Heart Failure and Renal Impairment or Hyponatremia: In patients with heart failure who have hyponatremia (serum sodium <130 mEq/L) or with serum creatinine >1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, Heart Failure, WARNINGS, and PRECAUTIONS, Drug Interactions.) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

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Therapeutic Apheresis
Cecal Villous Adenoma Causing Appendicitis



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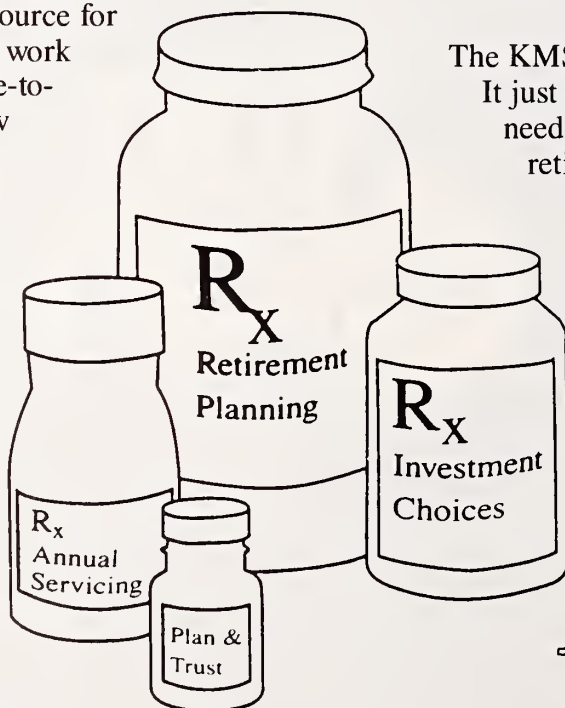
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**ABOUT OUR LOGO**

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

It sits in the corner of the field it once cleared, seemingly contemplating the ways of progress. It is, in fact, at an awkward age: displaced by those powered, multipurpose implements of today, but not quite old or rare enough to be sought out by some agriculture museum. Yet, it still performs a double service. For our purpose, it inspires artists, in this case Jim Hamil, to record it in their works — the concentric circles of the rake and the vertical lines of the trees against the background of the plains. But it also tells its story as a link with mankind's second-earliest (after hunting) efforts to provide sustenance.

The domestication that enveloped mankind was passed on to generally willing animals. But they too had to be fed, and as life became more complicated, feed crops — their growing and gathering — had to be provided. The gathering part inspired the development of rakes (woman- and child-powered, like as not) in a variety of shapes. (You might like to know the Romans called them *rastelli* — in case you get on *Jeopardy*.) Whittier's Maud Muller, who "raked the meadow sweet with hay," probably used one of wood, since that was the predominant material until the early 1800s, when metal styles appeared. The one on our cover was a more advanced model, since the tines could be lifted in transit to discharge the accumulated hay without loss of time in stopping to do it by hand.

It is apparent that the basic purpose hasn't changed over the years; the big change has been in the power, first human, then horse and then, with the advent of steam and combustion engines, the revolution in farm activities presaging the shift from the family-community farm to the big business-absent owners form. The continuing search for efficiency and speed brought the combination of cutting and baling and doomed the sulky types to becoming museum pieces or rusting in the fields awaiting the artist's attention.

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Shakespeare observed that some are born great, some achieve greatness and some have greatness thrust upon them. But what of one who combined all three?

True, greatness was not necessarily preordained by the circumstances of his birth. It was a middle-class situation, though he would come to abhor "class" as a social distinction, preferring a state of civil equality to be achieved by providing consideration of any group, especially the economically, socially or racially disadvantaged. But from the intellectual, religious and cultural background he was born to came a potential which he was able to convert to effectiveness.

Such effectiveness is born of conviction and requires a degree of egocentricity — that is, a consciousness of potential which compels the subject through the inevitable resistances. So it is impossible to separate this potential, whatever its character at birth and however conditioned by those early family-developed precepts, from the well established and recorded achievements that followed.

People who have the capacity to offer unusual services to the world are often assessed differently by those close to them, as opposed to those at a distance. So the process of translation of his potential to effectiveness worthy of being classified as great was by no means an easy one, especially since, though it ultimately brought comfort, it could also bring rejection along the way. The local community — social or medical — did not rush to embrace his thoughts and methods. Who among us, in our early stages, can be recognized as assured of success, much less the rarefied atmosphere of greatness?

He functioned, after all, in a conservative community — even unsophisticated by the standards usually associated with great deeds. Familiarity at least delays the realization of such a presence, even as it promotes ardent approval and attempts at identification with it after the fact.

Psychiatry and psychiatrists were viewed with no small degree of suspicion. They seemed to



advocate abolition of inhibitions and replacement with acceptance of behavior which clashed with the "healthy" mores of the community.

But a measure of the force of the man was that this phase of social rejection of such concepts was overcome largely by his part in bringing to the ordinary mind some understanding of the functioning of those unordinary minds with which he worked (and which were, after all, not that different). This was the message of *The Human Mind*, published, it will be recalled, as something of a companion piece to Logan Clendening's equally popular *The Human Body*. This publication has become a sort of focal point for the "beginning" of his career — incorrectly, of course, since that phase was well underway. But it was, indeed, somewhat of a turning point on the road to achievement, since it caught the attention of the public as his professional writings could not.

The greatness of his achievements has been thoroughly recorded and was of concern to him in a selfish sense, in that he could use the attention to bring others (and funds) to the causes he considered essential. His teachings, therapies and catholic interest in the world about him exemplified his dedication to the promotion of the health of humanity's mental functions at every level — and on every occasion. (And not the least of this greatness concept is that the cooperation of two brothers, so different in temperament and approach but equals in intellect, could balance their efforts to the benefit of their common purpose.)

It is inevitable that one of this dedication, given such subsequent success, will have greatness thrust upon him. The legend and effect were, of course, enhanced by the fact of his survival well beyond the norm. He was accorded honors of every degree — from the simple thanks of those he championed to national and international kudos. This association with success takes on a life of its own and, in a paraphrase of the Midas concept, the touch seems to turn the effort to achievement.

So, posthumously, he will continue to have greatness thrust upon him. It can be hoped that in years to come, the man will not be lost in the legend. D.E.G.

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Primary Care

In previous issues of KANSAS MEDICINE, I have addressed the problem of access to health care in terms of the growing number of patients who are unable to afford adequate health services. A parallel issue of equal importance is our diminishing manpower supply in the primary care specialties. The problem of an adequate number of primary care physicians for Kansas, particularly in the rural areas, is not a new one. The Kansas Medical Scholarship Plan, which was initiated in 1978, was a well-intentioned attempt by the Legislature to encourage medical students to consider practice opportunities in non-metropolitan communities. Although this program has undoubtedly served a useful purpose and has enabled a number of medical students to afford the high cost of medical education, there are at least two developments that limit this program's objectives: physicians "buy out" of their scholarship obligation rather than practice in underserved areas, and the number of scholarships available to students has progressively declined over the years. Physician manpower studies show variations in the location of areas of need for primary care physicians, but even in the most recent report there are at least 60 counties whose citizens are not adequately served.



Another disturbing trend in future primary care manpower projections is the diminishing number of students entering primary care residency programs. Vacancies continue to exist nationwide in the residencies of family medicine, internal medicine and pediatrics. Perhaps the indefensible and inappropriate current reimbursement system for cognitive services by physicians will be improved by implementation of the RBRVS system nationwide and thereby send a signal to our medical students that the non-procedural disciplines of medicine are as important as the presently more lucrative practice opportunities in the technical specialties. In the meantime, however, Kansas communities are continuing to experience major problems in receiving medical care from a primary care physician, and this issue stands apart from my previous discussion regarding access to health care limited by the ability to pay for such services.

What can be done to improve primary health care in Kansas? There are at least three initiatives that should be pursued in a statewide effort to address this problem. First, the Kansas Medical Society should support the efforts of the Kansas Academy of Family Physicians in their recent resolution to the University of Kansas School of Medicine asking for greater commitment of medical education to the primary care disciplines. Certainly, a renewed commitment to the rural preceptorship program, rural health weekends, ambulatory care educational programs directed to educational assignments to faculty in non-metropolitan communities and support of the pri-

"Physician manpower studies show variations in the location of areas of need for primary care physicians, but ... there are at least 60 counties whose citizens are not adequately served."

mary care residency programs are all examples of the positive role that the KU School of Medicine could play in supporting an interest in commitment of medical students and residents to primary care.

Secondly, the University of Kansas School of Medicine in Wichita has recently been awarded a grant to develop a primary care bridging program with non-metropolitan communities in the state. This program provides financial incentives for residents in the primary care disciplines to commit to two years of practice in a non-metropolitan Kansas community. The Kansas Medical Society has supported this plan, and it is hoped that through this linkage a greater percentage of our primary care residents will initiate practice in Kansas at the completion of their educational programs.

Thirdly, the Kansas Medical Society is partic-
(Continued on page 223.)



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References

1. *USP DI Update*, September/October 1988, p 120
2. *Br J Clin Pharmacol* 1985;20: 710-713
3. *Data on file*, Lilly Research Laboratories
4. *Scand J Gastroenterol* 1987;22(suppl 136) 61-70
5. *Am J Gastroenterol* 1989;84: 769-774



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Laboratory Tests—False-positive tests for urobilinogen with Multistix[®] may occur during therapy.

Drug Interactions—No interactions have been observed with theophylline, chloriazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450 enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increased serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

Carcinogenesis, Mutagenesis, Impairment of Fertility—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given

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an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events was due to the drug.

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Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to three times the upper limit of normal, however, did not significantly differ from that in placebo patients. Hepatitis and jaundice have been reported. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Because cross-sensitivity among this class has been observed, H₂-receptor antagonists should not be administered to those with a history of hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

PV 2098 AMP

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Additional information available to the profession on request.



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ipating in a statewide program, sponsored by the Wesley Foundation which is directed by the Department of Health and Environment, the Kansas Hospital Association and the Emergency Medical Services of Kansas. This project will attempt to better define primary care medical practice in the rural community through a redefinition of the small community hospital and linkage with regional medical centers. It is hoped that this will provide a framework that will be attractive to primary health care physicians through a better organization of services.

These three new developments should be supported with encouragement from all practicing physicians in Kansas, regardless of their specialty. Despite occasional surveys which attempt to show that subspecialists do provide a degree of primary care to their patients, one cannot deny the fact that our patients expect medicine to be organized in such a fashion that their access to health care is through a physician, broadly and compassionately trained, who can provide the continuity of care that they have every right to expect.

Joseph E. Grech, M.D.

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The Worker's Compensation Act: 1990 Amendments

WAYNE T. STRATTON, J.D.,* *Topeka*

On July 1, 1990, the provisions of Substitute for House Bill No. 3069 became effective. These amendments significantly alter the Worker's Compensation Act as it affects physicians:



1. The Director of the Division of Worker's Compensation is empowered to adopt a schedule of fees. These may be either statewide or based upon geographical areas. Such fees must be approved by the Advisory Panel. The Advisory Panel consists of: the Commissioner of Insurance; one appointee each from the Kansas Medical Society, the Kansas Association of Osteopathic Medicine, the Kansas Hospital Association, and the Kansas Chiropractic Association; and three members appointed by the Secretary of the Department of Human Resources, of whom one shall be a representative of employers recommended by the Kansas Chamber of Commerce and Industry, one shall be a representative of employees recommended by the Kansas AFL-CIO, and one shall be a representative of entities providing vocational rehabilitation services.

This panel shall annually review and approve the schedules of maximum fees. All fees and charges paid for treatment shall not exceed the amounts prescribed by the schedule of maximum fees, except in instances involving exceptional cases in which there are extraordinary medical procedures or circumstances.

In reviewing and approving the schedules of maximum fees, the panel is instructed to consider the following:

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

What are the changes regarding fees allowed, utilization review and restraints upon collection efforts?

- a. The levels of fees for similar treatment, care and attendance imposed by other health care programs or third-party payors and the locality in which such treatment or services are rendered.
- b. The impact upon costs to employers for providing a level of fees for treatment, care and attendance which will insure the availability of treatment, care and attendance.
- c. The potential change in worker's compensation insurance premiums or cost attributable to the treatment.
- d. The financial impact of the schedule of maximum fees upon health care providers and health care facilities and its effect upon their ability to make available to employees such reasonable and necessary treatment, care and attendance to each injured employee.

Any contract or any billing or charge which exceeds the recommended rates is unlawful, void and unenforceable as a debt. Moreover, if there is a willful overcharge or a pattern of improperly charging or overcharging, the Director may impose a civil fine not to exceed \$5,000.

2. The second significant change in the Act is the creation of a utilization review and peer review procedure. The Director is empowered to develop and implement or contract with a qualified entity to develop and implement utilization review and peer review procedures relating to the services rendered by a health care provider. By

(Continued on page 227.)

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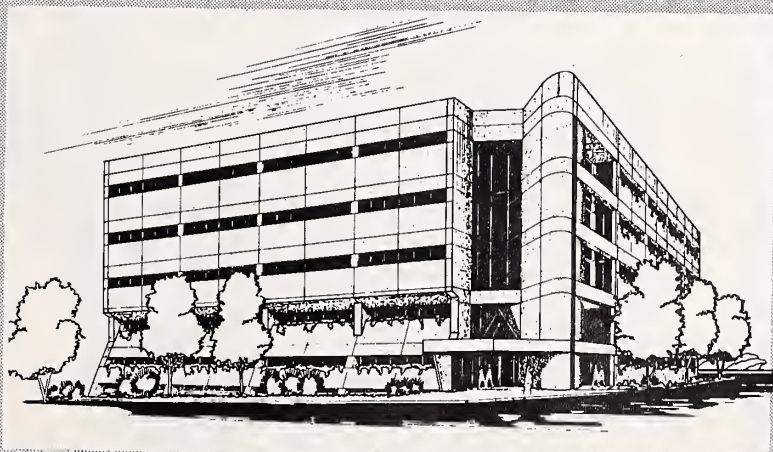
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Sioux Empire Medical Center

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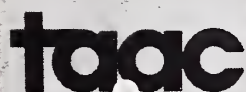
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2D Session

H.R. 5471

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MEDICINA ET LEX

(Continued from page 224.)

accepting payment, a health care provider shall be deemed to consent to submitting all necessary records to substantiate the nature and necessity of the service or charge and other information concerning such treatment to utilization review and peer review. If the Committee determines that a health care provider improperly overutilized or otherwise rendered or ordered unjustified medical treatment or services, or that the fees for such treatment or services were excessive, the Director may order the health care provider to show cause why it should not be required to repay the amount. Due process provisions are included in the Act.

3. The third significant change in the Act is the prohibition against a health care provider filing an action to collect for a medical or hospital bill against any worker covered by the Act. Any action filed prior to the date an application for worker's compensation benefits is filed shall be stayed until after the final adjudication of the claim. The statute provides that the statute of limitations be tolled (suspended) during this period; therefore, it is conceivable that health care providers

will not be able to collect accounts for a considerable amount of time.

It is also important for physicians to monitor worker's compensation proceedings so as to be aware of the effect of the adjudication. This may be done by contacting either the claimant's or the respondent's attorney, or the Director of the Division of Worker's Compensation.

Time will tell whether:

1. The fees will be fair and adequate. Mandating inadequate fees would appear to have constitutional implications.

2. The peer review and utilization review features will be fairly applied, or will just become another bureaucratic morass for physicians to struggle through.

3. Physicians will be paid for their services. It is possible for the parties to a worker's compensation claim to settle a claim without paying for the cost of health care. Since physicians are barred from filing suit, it is important that the worker's compensation proceedings be monitored and that agreements be reached with the claimant's and respondent's counsel so that the bills will be paid.

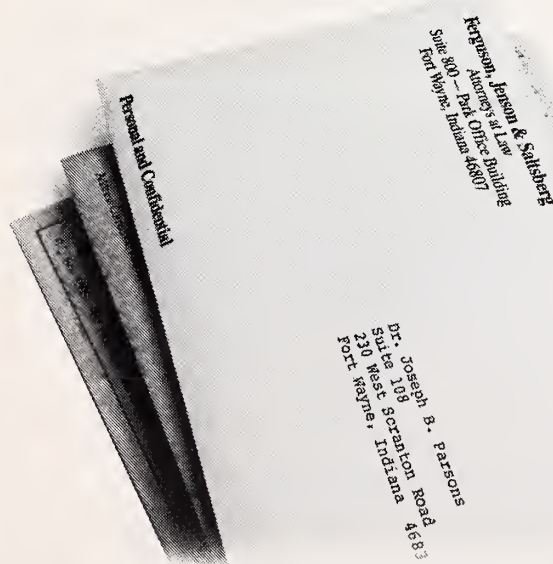
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Auxiliaries Support Work of KMS

Dear Physicians:

Perhaps you wonder what the medical auxiliary does. Our purpose is educational and charitable. We support Kansas Medical Society's programs to improve the health and quality of life for all people. I would like to use my home county auxiliary, Shawnee County Medical Auxiliary (SCMA), as a model to tell you what we do.



SCMA, the second-largest county auxiliary in Kansas, has 189 county and 153 state and national members. We hold monthly meetings except during a summer recess. Friendships and fun are always shared. Ongoing programs include coffee for new members, two investment clubs, bridge for couples, a book club and other social activities. This past year under the leadership of Cindy Warrick has been great! Meeting programs have ranged from a fashion show to Carol Bonebrake's talk on legal issues facing women and families. Dr. Gilbert Park spoke on sibling relations for all generations. For someone new to town, there is no better way to make friends than by joining the medical auxiliary!

Furthermore, the auxiliary had several projects to which they donated both time and money. For these purposes, a total of \$8,000 was raised last year.

One of the most rewarding experiences has been the AMA-ERF Christmas Sharing Card, with which thousands of dollars have been raised. Each year the card is designed through a contest among crippled children at the Capper Foundation in Topeka. To see the excitement of the children (one-third of them are nonverbal) always brings tears to our eyes.

Other projects include:

- A drug awareness puppet show presented at local elementary schools;
- Scholarships, totaling \$4200, awarded to students in health and allied health fields;
- A total of \$620 donated to Drug Awareness Coalition. (Our own member Michelle Voth is the president);
- Donation of \$620 to Ronald McDonald House. (Two of our members, Sherry Hiszczynskyj and Judith Megibow, initiated this program two years ago. Local physicians and auxiliary members raised \$50,000 for the house. Currently, several of our members serve on the board, and Carol Mueller is the president);
- Purchase of 31 videos, "Any Body Can Sit and Be Fit," were presented to area nursing homes, the library and local hospitals.
- At Christmastime we collected hygiene kits, which were sent to the Topeka Rescue Mission.

This county auxiliary is composed of a variety of talented members, including excellent officers, theatre experts, heads of several volunteer organizations, M.D., Ph.D. and some of the best volunteers and homemakers in the world! With Pat Peterson as our current president, SCMA is involved in another exciting and productive year.

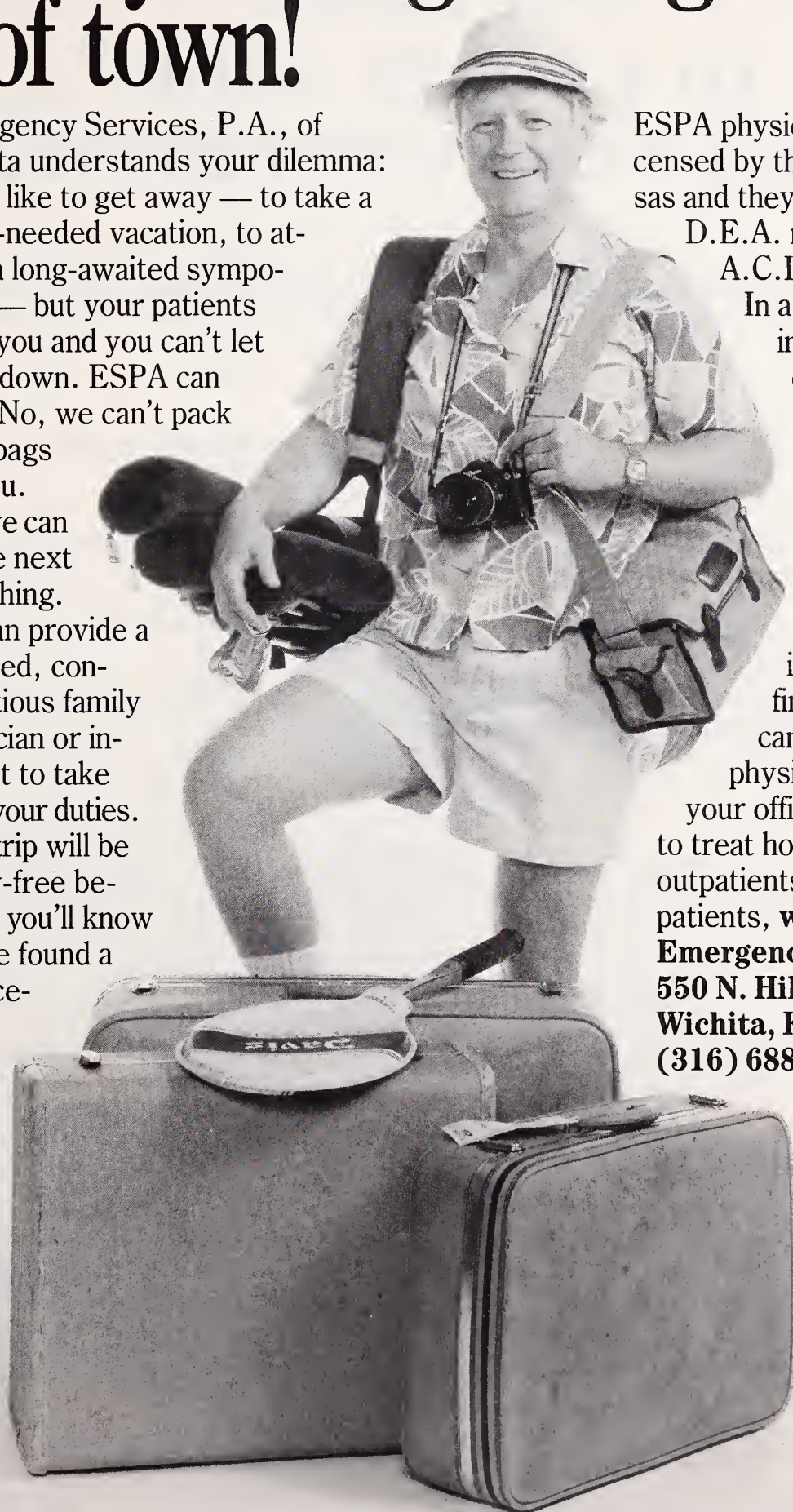
SCMA is one of 24 component auxiliaries in Kansas. Membership ranges from seven in one county to 283 in another. Each one has its own uniqueness. All of us stress legislative awareness. We are organized and ready to act whenever you need us. Our goal is to cooperate and enhance the functioning of your medical society. It is up to each of us to make our two organizations prosper.

Joying Jee

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Emergency Services, P.A., of Wichita understands your dilemma: You'd like to get away — to take a much-needed vacation, to attend a long-awaited symposium — but your patients need you and you can't let them down. ESPA can help. No, we can't pack your bags for you. But we can do the next best thing. We can provide a qualified, conscientious family physician or internist to take over your duties. Your trip will be worry-free because you'll know you've found a replacement you can trust.

ESPA physicians are licensed by the state of Kansas and they have current D.E.A. numbers and A.C.L.S. certification. In addition to providing locum tenens coverage, ESPA physicians staff the emergency room of one of the Midwest's leading hospitals, HCA Wesley Medical Center in Wichita. To find out how you can arrange for a physician to maintain your office practice and to treat hospital inpatients, outpatients and emergency patients, **write or call:**
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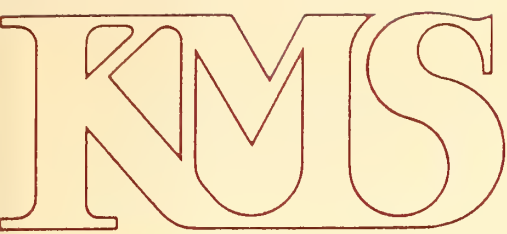
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KANSAS MEDICAL SOCIETY

Newsletter

SEPTEMBER 1990

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MEDICAL EDUCATION

As the 1990-91 academic year got underway, the University of Kansas School of Medicine welcomed 174 new students. The medical school has more than tripled its enrollment of "underrepresented" minorities, compared with the 1987-88 school year. This group, which includes black, mainland Puerto Rican or Mexican-American students, will make up about 6% of the 174 entering students, compared with less than 2% of the class four years ago. Three of this year's underrepresented minority students are Mexican-American and seven are black.

When they graduate, most American medical students will have large debts to repay--typically \$42,374 for those in the class of 1989, according to the Association of American Medical Colleges. And for underrepresented minorities average indebtedness was nearly \$6,000 higher than the mean for all 1989 graduates.

The AMA has published a booklet entitled The Future of Graduate Medical Education, which examines current trends and their implications for the future, including availability, structure and financing of residency programs. For a free copy of publication number NC210590, write to Marilyn Tapak, AMA, 515 N. State Street, Chicago, IL 60610.

HEALTH CARE SPENDING

Canadian health insurance may be too expensive for the U.S. According to a new study by the Health Insurance Association of America (HIAA), a national health insurance program similar to the Canadian model would require a 70+% increase in state tax revenues. HIAA states that such a system would need \$244 to \$252 billion in extra public money to operate. If we were to model a system exactly like Canada's, almost all of the burden would fall on the states, not the federal government.

The U.S. should spend more on health care, according to a Gallup poll commissioned by the Federation of American Health Systems. More than three in four Americans believe that the U.S. should spend more, not less, of the total national budget for health care than is now spent. Seventy-six percent of the 1,014 Americans surveyed as part of the Gallup organization's June 1990 Omnibus Survey believe that health care spending, now about 11% of the federal budget, should be increased--to as much as 26% of the budget, according to some respondents.

KMS TESTIMONY IN INTERIM STUDIES

On August 29 and 30, the 1990 Special Committee on Insurance conducted extensive hearings on state-mandated health in-

surance coverages. Under current law, there are essentially three mandated coverages: health care for newborn infants under family coverage policies; coverage for mental disorders, including treatment for alcohol or drug addiction; and coverage for mammography when laboratory services are included in the policy. There are also mandates that require insurers to reimburse certain categories of providers.

The Kansas Medical Society called upon the expertise of three specialists to discuss the merits of mandated health insurance coverage. Arthur C. Cherry, Jr., M.D., a Topeka pediatrician, discussed the importance of early screening and intervention in infancy in order to prevent costly disease at later stages in a child's life. Donald R. Brada, M.D., a Wichita psychiatrist, stressed the empirical evidence indicating that mentally ill patients tend to incur considerably more general health care costs prior to appropriate treatment for mental illness than they do following treatment. John D. Gay, M.D., a Topeka diagnostic radiologist, explained how mammography screening can forestall expensive surgery and also save lives. All three physicians emphasized quality-of-life considerations, as well as cost-benefit relationships.

A number of conferees defended mandated reimbursement to members of their profession, usually based on the argument that their fees are lower than physician fees for similar services. Then there was a parade of opponents who argued that all mandates should be repealed in order to reduce the cost of health insurance.

Another hearing the same week by the Task Force on Social and Rehabilitation Services reviewed the state's Medicaid program. J. G. (Gil) Kendrick, M.D., Senior Vice President for Medical Affairs at HCA Wesley Medical Center, Wichita, testified on behalf of KMS. Dr. Kendrick elaborated on the problems with which physicians are confronted when treating Medicaid patients. He focused on the "hassle factors" but also stressed that reimbursement rates are grossly inadequate. Chip Wheelen, KMS Director of Public Affairs, also testified and explained why it has become nearly impossible to shift losses incurred under Medicaid to other third-party payors and why physicians often must limit the ratio of Medicaid patients they treat in order not to jeopardize the financial viability of the medical practice.

NEWS FROM THE AMA

AMA/Net, the American Medical Association's electronic information and communication service which operated for almost ten years, was discontinued as of midnight on August 10. The AMA had tried several methods to attract subscribers to the service, including making subscriptions a member benefit in December 1988, but the service continued to suffer a considerable monthly loss. After 10 unsuccessful months of extensive negotiations to attract business investment to the service, the AMA determined it could no longer afford to operate AMA/Net.

As a result of the discontinuance of AMA/Net, the physician profile service was also discontinued on August 10. Alternative communication systems are being investigated. For

now, requests for physician profiles should be sent to AMA, Dept. of Physician Data Services, 515 N. State Street, Chicago, IL 60610. Requests from medical societies and FED/Net users will be handled on a priority basis and returned via first-class mail. Questions should be directed to Mary Schaedel at 312-464-5145 or Luba Struc at 312-464-5362.

Despite the demise of AMA/Net, a modified form of FED/Net will be maintained. FED/Net is the AMA's primary communication system for medical societies, providing daily news of legislation and other fast-moving developments.

Reminder: On August 27, the AMA completed its move to 515 N. State Street, Chicago, IL 60610. Their telephone exchange is now 464, and the main phone number is 312-464-5000.

DISPOSAL OF MEDICAL WASTE

The disposal of medical waste from physicians' offices is regulated by the federal government and the Kansas Department of Health and Environment. Areas regulated include segregation, storage, collection, transportation, processing and disposal.

KMS legal counsel has rendered an opinion summarizing the pertinent parts of state and federal regulations. If you are interested in receiving a copy of the legal opinion, please call the KMS office at 1-800-332-0156 or 913-235-2383.

MEDICARE: COMPARATIVE PERFORMANCE REPORTS (CPRs)

Medicare is using the carriers' already existing profiling system, with only minor changes, to identify the top 1% of physicians whose practice patterns "exceed" those of their peers, by location and specialty, per HCFA direction.

If you receive a letter and an exceptional profile:

- * Verify that your specialty and subspecialty are correct.
- * Check the procedure codes. Are they yours, or were they recoded by the carrier?
- * Call your carrier and ask questions about anything you do not understand.
- * Examine your practice. If you have a valid reason for your utilization (e.g., oncology services often warrant more intermediate and comprehensive office visits than pediatrics), inform your carrier in writing.
- * Be aware that the "CPR" listing is meant to be educational. However, it should put you on alert.
- * Call KMS for assistance if you have a concern you can't resolve with the carrier.

If you do not receive a CPR, you may request a copy of your data from the carrier. If you have a number of Medicare patients, you will want to see how the Medicare computer system measures your practice against your peers.

KMS-SRS LIAISON COMMITTEE

The KMS-SRS Liaison Committee, chaired by Philip A. Godwin, M.D., successfully represented members who were adversely affected by the SRS decision not to cover inpatient hospital psychotherapy. Testimony by Stuart C. Averill, M.D., on behalf of the psychiatrists in the state was instrumental in

rescinding the policy, and a new policy to allow payment was enacted with no lapse in coverage. Individual psychotherapy rendered in an inpatient hospital setting is covered when there is a treatment plan containing a psychiatric diagnosis and goals. Post-pay review of documentation of time spent in therapy, major issues covered in therapy, and changes in medications, diagnosis, condition, treatment plan or course of hospitalization will validate the medical necessity of each admission. Group therapy, normally rendered by hospital staff, remains content of service of the hospital reimbursement.

NATIONAL PRACTITIONER DATA BANK NOW OPEN

After four years of discussion and long delays, the National Practitioner Data Bank opened September 1, 1990. KMS has been monitoring the development and implementation of the Data Bank and will continue to inform the membership about it through newsletters and presentations throughout the state. As implementation of the NPDB proceeds, new issues and concerns will arise. KMS will continue to monitor the NPDB and its effect on the practice of medicine. You may call Carolyn Counts at KMS for assistance or additional information, 800-332-0156 or 913-235-2383.

NEW MEDICAL DIRECTOR AT KFMC

James E. Allen, M.D., has been named Medical Director at the Kansas Foundation for Medical Care (KFMC). Dr. Allen served as Associate Medical Director and as Acting Medical Director following the retirement of G. Rex Stone, M.D.

LOSEC/LASIX CONFUSION WILL END

To avoid confusion with another drug, Lasix (see KMS Newsletter, June 1990), Merck, Sharp & Dohme is changing the name of Losec (omeprazole) to Prilosec, as of October 1. In pharmacies, Losec will be dispensed until supplies run out.

MEDICAL ASSISTANTS NEWS

Medical Assistants Week is October 15-19, 1990, with Medical Assistants Day falling on October 17. This would be an appropriate time to express your appreciation to the medical assistants in your office.

In Kansas, Medical Assistants Week will conclude with the Kansas Medical Assistants Society Fall Education Seminar on October 20 and 21 in Atchison. Programs will be offered on CPT-4 coding, health care for teens in the 90s, and ACL reconstruction. The registration fee includes the seminar, meals and snacks and lodging. CEUs have been applied for. More information is available from Sharon Dyer, 913-367-5054. To register, complete this form and return it to Sharon Dyer, 1412 North 2nd Street, Atchison, KS 66002.

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SUSAN WARD, *Production Editor*

Bored on vacation and wish you were back in the OR? Wondering if your offspring have what it takes to be a surgeon? Getting nostalgic about those 72-hour work days during your residency? Then you're going to love life and death — not in the cosmic sense, but in the electronic.

Life and Death is a computer software program billed as "the world's first interactive medical movie," in which you, the user, are a first-year surgical resident in a frenzied medical center. You see patients, read their charts, order x-rays, lab tests and sonograms, and decide whether or not — gulp — to perform surgery.

If you choose to operate, the screen will display a tray containing scalpel, forceps, suture and other items you may need. Above the tray are small displays showing time, EKG and blood pressure. In another area on the screen you'll see messages, such as "BLOOD PRESSURE FALLING, DOCTOR," from the personnel who are assisting you. And occupying about two-thirds of the screen is a close-up view of your patient. Using a mouse (not the mammalian variety), you guide the instruments from their tray to the patient and cut, clamp, suction. . . . Organs may be removed as necessary — but don't drop them on the floor! You may suddenly find yourself with a bleeder, or your patient may develop abnormal EKG patterns or other unexpected problems.

As you become increasingly skillful, you will be assigned more challenging cases until finally you're operating in the gruesome Nightmare Mode. The graphics *are* graphic, and the manufacturer warns that this software is not for the faint of heart or weak of stomach (nor, presumably, for the very young).

To play *Life and Death* you'll need a computer with 512K RAM, and you'll want a color monitor and a mouse — but you won't need malpractice insurance!

Life and Death is published by Electronic Arts and sells for \$49.95.

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Therapeutic Apheresis: The St. Francis Experience

ANDRES CANDELA, M.D.,* PATRICK C. SADLER, M.D.,*
RAYMOND G. HAWLEY, M.D.,† AND WILLIAM PALKO, M.D.,§ *Wichita*

In recent years therapeutic apheresis has been increasingly utilized as a treatment modality in the ever-expanding medical armamentarium. In many diseases, its use has gained increased acceptability, and it is sometimes considered to be the gold standard of treatment. However, there are other conditions for which, to date, the criteria for utilizing apheresis remain nebulous. Apheresis, as its Greek name implies, literally means "removal of." The added prefixes of *plasma-*, *platelet-*, *leuka-*, and *erythrocyta-* are indicative of the type of blood constituents to be removed. This procedure, while promoted as a therapy for a growing number of diseases, is also routinely used to harvest specific blood components (i.e. platelets and granulocytes) from healthy donors for subsequent transfusion, frequently to oncology patients.¹ In this report we will focus on the number of therapeutic apheresis procedures (mainly plasmapheresis) performed at St. Francis Regional Medical Center (SFRMC) over the past six years, and illustrate which conditions commonly received therapeutic apheresis.

At our institution, under the order of the attending or consulting physician (most often the oncologist or hematologist), this procedure is supervised by the clinical pathologist and carried out by two registered nurses from the American Red Cross. The regional American Red Cross, with the guidance of their medical director, has specifically instructed their nursing personnel to a high level of proficiency in executing therapeutic apheresis. Their training consists of familiarity with the principles behind apheresis, the apparatus itself and complications that could arise from

the procedure. In addition, they are required to hold a current certification in basic cardiac life-support resuscitation.

At SFRMC there has been a rise in the number of patients undergoing therapeutic apheresis (see Figure 1). There also is a steady rise in the number of procedures per patient. Most of these patients, with few exceptions, have experienced therapeutic apheresis repeatedly for their underlying condition. The 10 most common conditions that called for plasmaphereses (68 patients over a six-year period) included Guillain-Barré syndrome, thrombotic thrombocytopenic purpura, systemic lupus erythematosus, hyperviscosity syndrome, chronic inflammatory demyelinating polyradiculoneuropathy (CIDP), Goodpasture's syndrome, rheumatoid arthritis, renal transplant rejection, cryoglobulinemia and vasculitis (see Table 1). Additional, less common, use of plasmapheresis (15 patients) included idiopathic and immune thrombocytopenia purpura, myeloma kidney disease, idiopathic pulmonary hemorrhage, cold agglutininemia with hemolytic anemia, rapidly progressive glomerulonephritis, hemolytic uremic syndrome, bullous pemphigoid, Henoch-Schönlein nephritis, chronic liver disease with circulating anticoagulant and progressive scleroderma. Other instances in which therapeutic apheresis has been employed at our institution included plateletpheresis for removal of platelets for thrombocythemias (20 patients) and leukapheresis for removal of granulocytes for acute myelogenous leukemia (18 patients). Red blood cell exchange was used successfully in one patient with sickle cell anemia complicated by priapism.

Long-term follow-up data are not available for our patients treated by apheresis, although some of our patients were entered into the National Red Cross Apheresis Study between 1981 and 1987. When compared with nationally accepted conditions according to the AMA Council on Scientific Affairs that convened in December 1984, four out of the 10 most frequent conditions in which therapeutic apheresis was performed at our

* Dept. of Pathology, UKSM-Wichita

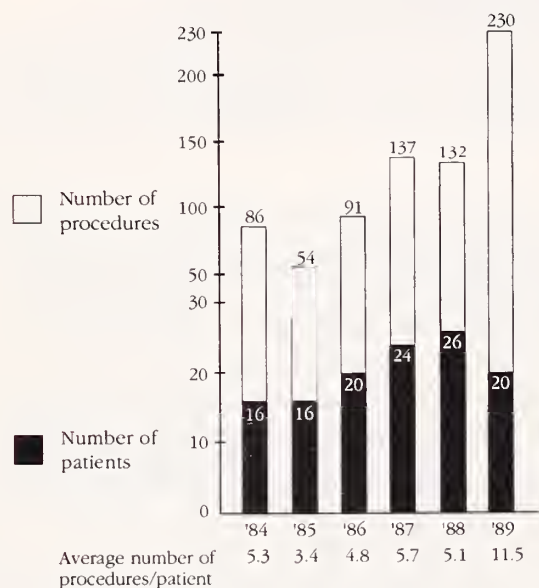
† Blood Bank Services, St. Francis Regional Medical Center; Dept. of Pathology, UKSM-Wichita

§ Blood Bank Services, American Red Cross, Wichita Region.

Address correspondence and reprint requests to Dr. Hawley at St. Francis Regional Medical Center, 929 N. St. Francis, Wichita, KS 67214.

Therapeutic Apheresis

6 Year Study (1984-1989)



Total patients: 122
Average: 20 patients/year
Total procedures: 730
6 year average procedures/patient: 5.98

(Fig. 1)

Figure 1. Therapeutic apheresis: six-year study (1984-1989). Total patients: 122; average: 20 patients/year. Total procedures: 730; 6-year average procedures/patient: 5.98.

institution fell into the category of "standard therapy, acceptable but not mandatory," as outlined by the council; these are thrombotic thrombocytopenic purpura, hyperviscosity syndrome, Goodpasture's syndrome and Guillain-Barré syndrome. Five conditions (renal transplant rejection, systemic lupus erythematosus, vasculitis, rheumatoid arthritis and cryoglobulinemia) were listed under the category "available evidence tends to favor efficacy; conventional therapy usually tried first." The remaining one condition (chronic inflammatory demyelinating polyradiculoneuropathy) was under the category of those "inadequately tested at this time."² However, a subsequent randomized double-blind sham apheresis trial of severely affected patients with CIDP showed some benefit with apheresis.³

The complications associated with apheresis procedures performed at SFRMC reflect those summarized by others for these procedures in general.^{4,5} Most complications are associated with therapeutic plasmapheresis, since this is the most common procedure, and they depend to some extent on the replacement solution used (plasma versus albumin). The range of complications varies from mild to life-threatening. The usually mild anticoagulant (citrate) effects, allergic reactions or local hemorrhage are easily controlled. Most serious, sometimes fatal, reactions include anaphylaxis, cardiac arrhythmia or arrest and acute refractory pulmonary edema. No procedure-related fatalities have occurred at SFRMC. Complica-

TABLE 1
ST. FRANCIS REGIONAL MEDICAL CENTER
6-YEAR STUDY (1984-1989): THERAPEUTIC PLASMA PHERESIS

Ten Most Common Diagnoses	Number of Patients	Number of Procedures	Avg. Procedures Per Patient
1. Thrombotic thrombocytopenic purpura	13	135	10
2. Guillain-Barré syndrome	12	92	8
3. Vasculitis, generalized and renal	11	42	4
4. Systemic lupus erythematosus and vasculitis	8	77	10
5. Hyperviscosity syndrome	8	42	5
6. Renal transplant rejection	4	4	1
7. Chronic inflammatory demyelinating polyradiculoneuropathy	4	85	21
8. Goodpasture's syndrome	3	16	5
9. Cryoglobulinemia and vasculitis	3	18	6
10. Rheumatoid arthritis and vasculitis	2	10	5
TOTAL:	68	521	8

tions at SFRMC have been of the mild variety, and easily controlled. However, one patient developed otherwise unexplained acute pulmonary edema after therapeutic plasmapheresis, and one patient experienced acute chest pain associated with the procedure. The nature of the chest pain in the latter case was thought to be angina and was corrected by using a smaller collection bowl.

In summary, although therapeutic apheresis has been quite acceptable for certain procedures because of its efficacy, for other conditions the indications are not clear. Conditions such as systemic lupus erythematosus, cryoglobulinemia and vasculitis without renal disease have shown both subjective and objective clinical improvement in some patients. Indications and contraindications must be considered on an individual-patient basis.

REFERENCES

1. Walker RH, et al., eds. *Technical Manual* (AABB, 1990), pp. 19–35.
2. Dyck PJ, Daube J, O'Brian P, et al. Plasma exchange in chronic inflammatory demyelinating polyradiculoneuropathy. *NEJM* 1986;314:461–65.
3. Current status of therapeutic pheresis and related techniques: Report to the AMA Panel of Therapeutic Pheresis, Council on Scientific Affairs. *JAMA* 1985; vol. 253, no. 6.
4. Huestis DW. Risks and adverse reactions associated with hemapheresis. In: MacPherson JL, and Kasprisin DO, eds., *Therapeutic Hemapheresis*, vol. 1 (Boca Raton: CRC Press, 1985), pp. 39–46.
5. Westphal RG. Complications of hemapheresis. In: Westphal RG and Kasprisin DO, eds., *Current Status of Hemapheresis: Indications, Technology and Complications* (Arlington, Va.: American Assoc. of Blood Banks, 1987), pp. 87–104.

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Cecal Villous Adenoma Causing Acute Perforative Appendicitis in the Elderly

RICHARD L. HENDERSON, M.D.,* AND ROGER YOUMANS, M.D.†

Appendicitis is the most common acute surgical disease of the abdomen in the United States, occurring most commonly in the second and third decades of life. Fewer than 10% of patients who undergo surgery for this disease are over the age of 60 years, yet this older age group accounts for more than 50% of all the deaths related to appendicitis.

While there have been some rare cases of a villous adenoma of the appendix, there are no reports of a cecal villous adenoma obstructing the appendiceal orifice, causing an acutely perforated appendix and periappendicitis. Recently, such a situation did occur in an elderly man at the Veterans Administration Medical Center (VAMC) in Topeka. This case is described below and is followed by a brief literature review, emphasizing the importance of tumors causing acute appendicitis and their need for aggressive surgical management.

Case Report

The patient was a 71-year-old white male admitted to the VAMC for surgery after an admission one month earlier for abdominal pain and acute gastrointestinal hemorrhage. He was given supportive treatment, and the diagnoses of appendicitis, diverticulitis and colonic polyps were entertained. He improved, and a barium enema during that admission showed a single, 4-centimeter, sessile, cecal mass. Biopsy performed at the time of colonoscopy revealed the mass to be a villous adenoma. The remainder of that hospital course was uneventful. He was scheduled for a subsequent readmission and right hemicolectomy, because of the increased risk of malignant degeneration in the tumor. During the interim, he denied any abdominal pain, constipation, nausea, vomiting, diarrhea or recurrent bleeding.

* Family physician, Riverside, California.

† General surgeon, Tulsa, Oklahoma.

Address correspondence and reprint requests to Dr. Youmans at 7306 S. Lewis, Tulsa, Oklahoma 74136.

His past medical history included coronary artery disease complicated by a myocardial infarction in 1976.

The patient was thin but well developed and well nourished, and was in no acute distress. His vital signs were stable, and his blood pressure was 108/60. His lungs were clear, and cardiac examination revealed a grade II/VI systolic ejection murmur. Abdominal exam showed no tenderness, guarding, rebound, organomegaly or masses. Bowel sounds were normoactive. His rectal examination was negative for occult blood. No mass was noted in the prostate or rectum.

Laboratory examination showed a white blood cell count of 5000 cells/mm.³ His hemoglobin and hematocrit were 12.7 gm/dl and 37.6%, respectively. His electrolytes, BUN and creatinine were within normal limits, as were his SGOT, LDH and alkaline phosphatase. His SGPT was elevated at 80 units per liter. A preoperative MUGA scan showed his left ventricular ejection fraction to be 43%.

After the standard bowel preparation, which included clear liquids, cathartics and oral neomycin and erythromycin base, he was taken to the operating suite. At laparotomy, a six-centimeter (diameter) mass was found in the cecum, and the appendix was scarred into an inflammatory mass surrounding it. Exploration showed no obvious metastases. The gallbladder contained multiple small stones, and was surrounded by rather dense adhesions.

A right hemicolectomy with an ileotransverse colostomy and a cholecystectomy were performed. The gallbladder was opened, revealing white mucus without bile staining, indicating that the cystic duct had been occluded for some time. The gallbladder bed was drained.

Examination of the gallbladder by the pathologist showed chronic cholecystitis and acute pericholecystitis. Also noted were numerous mixed stones. We did not believe that the chronic cholecystitis and cholelithiasis were related to the cecal tumor and appendicitis. Examination of the

hemicolectomy specimen showed multiple hemorrhages and areas of adhesions surrounding the appendix. The serosal surface was covered with a small amount of fibrin. On sectioning the colon, a villous adenoma measuring 2.2 cm x 1.7 cm x 0.4 cm was found obstructing the entrance of the appendix into the colon (as shown in Figures 1 and 2). This tumor was confined to the mucosal surface of the cecum and did not invade the muscularis nor extend into the appendiceal lumen itself. The appendiceal lumen contained scattered hemorrhages.

Microscopic examination demonstrated the tumor to be a villous adenoma with no malignant degeneration (Figure 3). The tumor had obstructed the appendiceal lumen and had produced an acute or recurrent appendicitis complicated by an acute perforation with resulting periappendicitis (as shown in Figures 4 and 5).

The postoperative course was uneventful except for a leukocytosis of 23,000 cells/mm on the fifth postoperative day; a presumptive diagnosis of subphrenic infection was made. A course of antibiotics (cefoxitin and metronidazole) was given systemically, and the white count returned to normal. No other symptoms developed.

On the eleventh postoperative day, he was discharged with a normal leukocyte count and no complaints. His follow-up appointment in the clinic was unremarkable.

Discussion

Villous adenomas are sessile, neoplastic polyps that are soft to the touch. These tumors constitute about 5% (reports vary from 1.5% to 6%) of all colon tumors and are pre-malignant in nature.

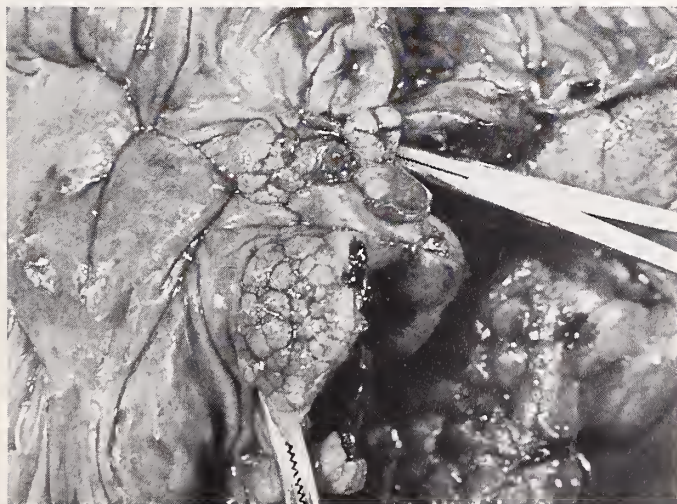


Figure 1. The villous adenoma is shown occluding the appendiceal orifice of the appendix.

Careful examination of the entire villous adenoma will show 40% of them to contain invasive carcinomas, and an additional 36% will show focal carcinoma or atypism.¹ A single biopsy of such a tumor may miss the malignant portion. Patients having a villous adenoma are usually over 60 years of age.

The clinical symptoms will vary, depending on the size and the location of the villous adenoma, but the most common symptoms are a change in bowel habits and rectal bleeding. Our patient was elderly and initially presented with abdominal pain and a small amount of rectal bleeding. The clinical symptoms responded to supportive care, and the diagnosis of a villous adenoma was made preoperatively by air-contrast barium enema and colonoscopy. As is common in elderly patients, the signs and symptoms of appendicitis were mild, even though the appendix had perforated. The fever and leukocyte response of younger people with appendicitis is often not present in older patients, as in this case. Although a fecolith is the cause of the initial obstruction of the appendix in 90% of the older patients with perforative appendicitis, in this case the villous adenoma which was limited to the cecum was the cause of the appendiceal obstruction. The high incidence of malignancy in villous adenomas demands that they be treated like cancers, and a hemicolectomy is the treatment of choice.

Appendicitis is actually the presenting condition in many older patients with tumors of the cecum due to obstruction of the appendiceal lumen by the tumor. Mayo² reported that 15% of the patients undergoing a right colectomy for cancer had undergone appendectomy during the time

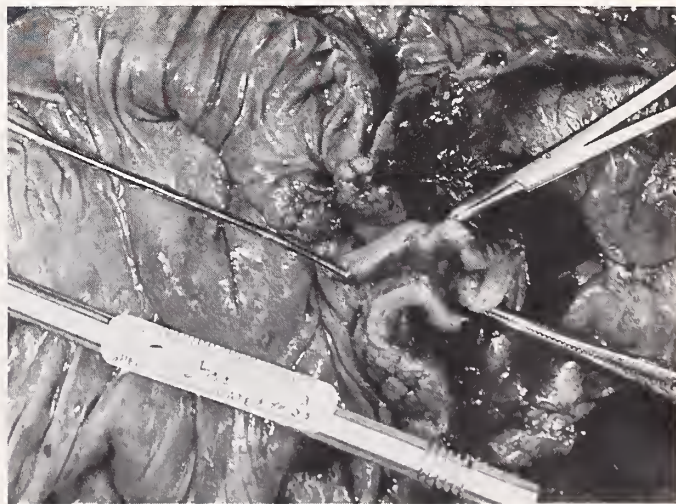


Figure 2. Gross picture of the cecum showing the appendix with the villous adenoma at the orifice.

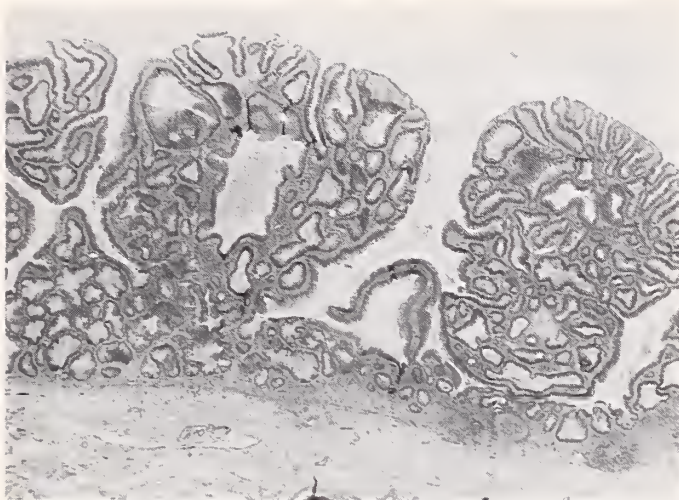


Figure 3. Low-power photomicrograph of the villous adenoma of the cecum.

period when their symptoms were due to the cancer. Ambjornson³ found that 2.9% of the Swedish patients over 40 operated on for appendicitis were readmitted in 3 years for carcinoma of the colon. It is widely accepted now that appendicitis in older patients, particularly with anemia, should alert the surgeon to the possibility of a cancer in the cecum or right colon. Weight loss, a palpable mass, and atypical pain are further warnings that a surgical approach that allows the surgeon to do a right hemicolectomy is indicated (see Table 1).⁴

Two recent articles by Peck⁵ and Lenriot and Huguier⁶ reported 33 and 32 patients, respectively, with adenocarcinoma of the appendix who presented with acute appendicitis. Most of the patients were over 50, but nine were under 47 years of age. Both authors agreed that a right hemicolectomy was the operation of choice. Carcinoids tend to be much less malignant than adenocarcinomas of the appendix, and are more



Figure 4. Ulceration of the appendix with chronic inflammatory process extending into the adjacent fat.

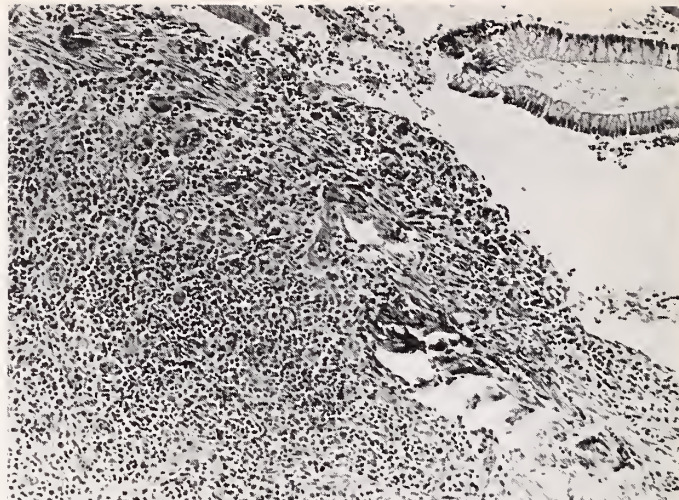


Figure 5. High-power photomicrograph of the acute and chronic inflammatory response in the cecum.

common. A simple appendectomy may suffice for the treatment if the carcinoid is limited to the distal appendix.⁷

The role of villous adenomas in acute appendicitis has had only occasional case reports. Gold-

TABLE 1
FINDINGS THAT SUGGEST A TUMOR IN
ELDERLY PATIENTS WITH APPENDICITIS

1. Change of bowel habits
2. Anemia
3. Atypical pain
4. Weight loss
5. Palpable mass in the abdomen

farb and Kempson⁸ reported three cases of villous adenomas of the appendix itself in patients 80, 66 and 60 years old. Two of these cases presented as an abdominal mass and were diagnosed by colonoscopic exam or barium enemas before surgery. Pettigrew⁹ reports a case of a carcinoma in a villous adenoma involving both the appendix and cecum and producing acute appendicitis in an 85-year-old man. Munk¹⁰ reported a case of perforated appendicitis secondary to a villous adenoma involving the cecum and the appendix in a 66-year-old woman. Forty-seven cases of villous adenomas in the appendix have now been reported in the literature,¹⁰ many associated with appendicitis. Far more villous adenomas of the cecum have been reported, but our patient is the first with a benign villous adenoma limited to the cecum associated with appendicitis.

Acute appendicitis is a difficult diagnosis to make in elderly patients. If there are symptoms or signs that suggest that a tumor might be involved (Table 1), a more extensive work-up, in-

cluding an ultrasound exam of the right lower quadrant, a barium enema and a colonoscopy or a CT scan, may be indicated. If urgent surgery is necessary without these additional diagnostic procedures, a surgical incision should be used that would allow the resection of the right colon if a tumor is found in the cecum or appendix.

REFERENCES

1. Cohn I and Nance FC. "Intermediate or precancerous lesions and malignant lesions," in *Sabiston's Textbook of Surgery* (Philadelphia: W.B. Saunders, 1986), pp. 1003-4.
2. Mayo CW. Malignant lesions in the right portion of the colon. *Proc of Staff Meetings of the Mayo Clinic* 1941;67-69.
3. Armbjornson E. Acute appendicitis as a sign of colorectal carcinoma. *J Surg Onc* 1982;20:17-20.
4. Hill J and Leapen DJ. Acute appendicitis and carcinoma of the colon. *J Royal Soc Med* 1986;79.
5. Peck J. Management of carcinoma discovered unexpectedly at operation for acute appendicitis. *Am J Surg* 1988;255:683-85.
6. Lenriot JP and Huguier M. Adenocarcinoma of the appendix. *Am J Surg* 1988;155:470-75.
7. Dent TL, Batsakis JG and Lindenauer SM. Carcinoid tumors of the appendix. *Surgery* 1973;73:828.
8. Goldfarb W and Kempson R. Villous adenomas of the appendix. *Surgery* 1964;55:769-72.
9. Pettigrew RA. Invasive carcinoma arising in villous adenomata of the appendix. *Aust NZ J Surg* 1980;50:627-29.
10. Munk JF. Villous adenoma causing acute appendicitis. *Br J Surg* 1977;64:593-95.

The authors wish to express their appreciation to the Colmery-O'Neil VAMC in Topeka and to Dr. Ramon Guillan, Chief of Pathology at Colmery-O'Neil, for his assistance with the photographs.

VOX DOX

Information on Orphan Trains Is Needed

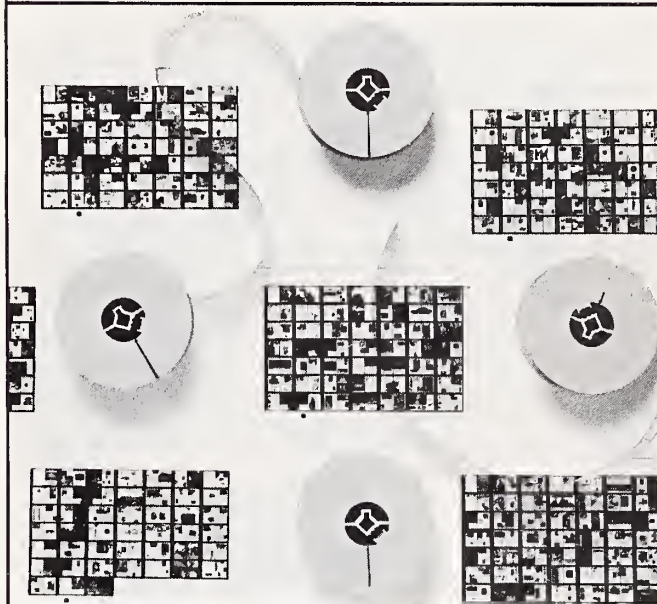
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Mary Ellen Johnson
Executive Director, OTHSA

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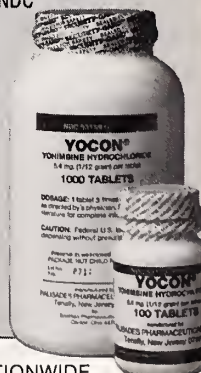
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

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References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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Wide QRS Tachycardia with RBBB Configuration

DONALD L. VINE, M.D.,* *Wichita*

Misdiagnosis of wide QRS tachycardia has recently received attention because the treatment of ventricular tachycardia with drugs such as verapamil can lead to hemodynamic deterioration and cardiac arrest. While QRS morphology should never be taken as the sole criterion for differentiating between aberrancy and ectopy, a summary of published information may be useful.

Wellens' Study

In 1978, Hein Wellens¹ reviewed the QRS morphology of 140 episodes of wide QRS tachycardia obtained from the records of 122 non-consecutive patients. Right bundle branch block configuration (RBBB), generally defined as a predominantly positive deflection in lead V₁, was present in 93 of these cases.

From patients with RBBB QRS configuration, Wellens identified seven patterns for lead V₁ and six patterns for lead V₆ (Figure 1).

Supraventricular tachycardia was suggested when patients had "classic" triphasic rSR' or rSR' patterns in V₁ (Wellens' V₁ patterns 3 and 4), especially when lead V₆ showed a triphasic pattern with a "septal" q-wave and an R/S ratio greater than one (Wellens' V₆ pattern 1). The presence of most other patterns favored the diagnosis of ventricular tachycardia.

Akhtar's Study

Recently, Masood Akhtar and associates² described the QRS patterns from a series of 150 consecutive patients with wide QRS tachycardia. Right bundle branch block configuration was seen in 85 patients, of whom 70 had ventricular tachycardia, 11 aberrant conduction and 5 accessory pathway conduction.

Of these, a triphasic QRS pattern was seen in 70% of patients with aberrant conduction and in 13% of those with ventricular tachycardia.

Comparison

The sensitivity (Sens) of a test is the likelihood that an individual with the condition, ventricular

tachycardia in this discussion, will have a positive test. If the absence of "classic" Wellens' V₁ patterns 3 or 4 is taken as a positive test for the presence of ventricular tachycardia, then the sensitivity is 91%. The specificity (Spec), or likelihood that individuals without ventricular tachycardia will have a negative test, is 83%.

If specific patterns are ignored, then the simple presence of a monophasic or biphasic complex in V₁ provides a sensitivity of 71% and a specificity of 98%.

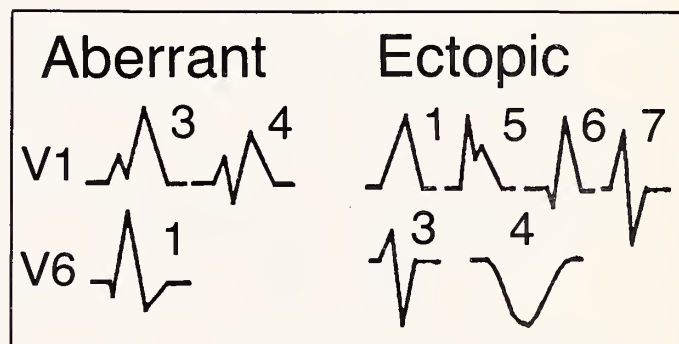


Figure 1. Wellens' pattern numbers most often associated with aberrancy or ectopy.

The predictive value of a positive test (PVPT), the likelihood that an individual with a positive test will have ventricular tachycardia, is a clinical yardstick of the utility of a test, but suffers the limitation of being dependent upon the prevalence of the condition in the population being studied. In order to compare the data from Wellens' study with that of Akhtar, the values in the table have been normalized to a prevalence of ventricular tachycardia of 82% (Table 1).

The predictive value for ventricular tachycardia of a monophasic or biphasic QRS in V₁ or V₆ is between 88% and 99%. The predictive value of a negative test (PVNT), the likelihood that individuals with triphasic QRS complexes will not have ventricular tachycardia, is less (43 to 76%).

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TABLE 1.
ACCURACY OF NON-TRIPHASIC QRS PATTERN
FOR THE DIAGNOSIS OF RBBB CONFIGURED
VENTRICULAR TACHYCARDIA

Lead/Author	Sens	Spec	PVPT	PVNT
V1 Wellens	71%	98%	99%	43%
V1 Akhtar	87%	47%	88%	44%
V6 Wellens	96%	65%	92%	76%
V6 Akhtar	90%	73%	94%	61%

Values normalized to a prevalence for ventricular tachycardia of 82%. (See text for abbreviations)

Comments

Since the predictive value of a positive test using a "classic" interpretation of Wellens' data (96%) is similar to that using a simple triphasic/non-triphasic approach, either strategy would seem appropriate for diagnosing ventricular tachycardia. The false positive rate is probably 5 to 10% in the clinical setting, but the accuracy of a negative test for diagnosing supraventricular tachycardia is poor if the prevalence of ventricular tachycardia is high.

REFERENCES

1. Wellens HJJ, Bar FWH, Lie KI. The value of the electrocardiogram in the differential diagnosis of a tachycardia with a widened QRS complex. *Amer J Med* 1978;64:27-33.
2. Akhtar M, et al. Wide QRS complex tachycardia: Reappraisal of a common clinical problem. *Ann Intern Med* 1988;109:905-12.

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- recommendation of policy to the House of Delegates on Denial of Payment for Pre-Existing Conditions, Third Party Payors and Patient Care Standards;
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October 1990

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Erythromycin and Gastroparesis
Anesthesia Mishaps



KANSAS MEDICINE

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1. Data on file, G.D. Searle & Co.
2. 1988 Joint National Committee: The 1988 report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. *Arch Intern Med* 1988;148:1023-1038.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol clearance may occur with combined use. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration.

Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°, 2°, 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, increased urination, spotty menstruation, impotence.

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It would be difficult to find a scene more representative of Kansans' interest in wildlife than Jim Hamil's rendition of a corner of the Cheyenne Bottoms. To bird watchers and nature lovers generally, this area in the center of the state is at least as well known as some of those attributes getting wider publicity — tornadoes, for example. Its name comes from the fact that the Cheyenne Indians were even more aware of its attraction for birds and hunted the area long before the interlopers arrived. The Cheyennes have become rarer than some of the bird species that once flocked there. But the Bottoms' prominence in the attentions of such diverse groups as birdwatchers (whose "finds" are freely noted in their records) and hunters (whose successes are closely scrutinized and regulated by the authorities) assures widespread interest.

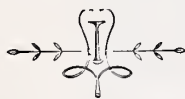
The area has had its problems, however. Generally only two feet deep, its 19,000 acres of marsh have suffered from intermittent drought and the drawing off of water from its contributing sources, particularly the Arkansas River, for human consumption. Where the Cheyennes might have taken more direct measures against such depletions, Kansas has at least taken the matter to court by suing the state of Colorado to limit its impounding of water for irrigation purposes. Meanwhile, the water levels are closely watched and, despite the certainty of some that the human interest seems always bent on destroying Nature's efforts, engineers are continually varying levels, controlling vegetation growth and maintaining dikes that direct water to areas in need.

As many know, there is much more to the importance of the Cheyenne Bottoms, but it would be an oversight to fail to mention the other areas that have changed Kansas from the "dry" state it once was. There are, in fact, some 69 wildlife areas under state control and an additional eight under federal management. The role of these areas as essential stopping places for migratory birds, as well as the permanent homes of numerous other species, gives Kansas a significant position in maintaining the ecosystem.

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In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and something which is ours alone."

What Goes Around Comes Around

It is now recorded in the archives of the Kansas Medical Society as Resolution 90-13. The subject, as you are aware, is the matter of unified membership with the AMA and, as is the way with resolutions, its official form reduces to parliamentary stereotype another chapter in the life and unsettled times of the state's leading medical organization. Whether it is the final chapter or not remains to be seen, but there is little in the current climate to make one think the issue will not be revived at some future time.



The total experience is, of course, of long standing and emanates from the fact that, given the option, a disturbing percentage of the nation's physicians has seen fit not to join the national organization. There are probably as many reasons or shades of reason that the non-members cite for not joining as there are such individuals. But the AMA, confronted with the radically changing medical world, has moved in the last decades from the professional and educational status of its earlier years to its present political, social and economic roles (as has every physician in his or her practice microcosm). It has become increasingly distressing to the national organization that it represents less than half the practicing physicians in this country (a fact of which it is frequently reminded by various adversaries). The plan for unified membership, born 30 years ago, was a calculated risk and in a sense displaced the responsibility for boosting its own membership onto the component societies.

The fact is that, however much individuals and groups might support in spirit the efforts of the AMA, the principle of enforced membership prompted complaints against this form of coercion — abetted to no small degree by the matter of money, since the growing needs of financial support at the local level made the expense of this additional (and required) sum more painful. Moreover, many members felt less attraction for this mammoth organization than they did for their specialty or auxiliary organizations when it came to effective representation, a feeling that extended to a degree even to the state organizations. Bigness may be admired collectively but can be suspect to the individual mind.

Historically, it is of interest to note that Kansas was one of the first states to subscribe to the unified plan, joining Oklahoma and Illinois (with the Cook County tail wagging the dog). A scenario of success would have been a rush of other states to the cause, but only three others did so. The Kansas experience was less than salutary. The 75% of members also having membership in the AMA decreased, meaning a loss of KMS members accordingly, but a general increase in membership eased the loss without too serious an impact on the state organization. Resistance was growing, however, as some failed to perceive the blessings of unification, and in 1971 Kansas withdrew from the plan.

By 1985, despite the lack of the coercive element, the number of KMS members voluntarily holding AMA membership had dropped to 61%, though the membership total was holding up as the state's physician population increased. This and the medical climate nationally were enough to support a feeling that the benefits of unification were great enough to give it another try, and 1985 brought a return to the AMA fold. Whether it was a reaction against the AMA (as cited by some) or the recurrent objection to coercion (cited by many) or the added expense at a time when practice overhead was increasing (as blamed by many) or a combination of these and other complaints, there was a real loss of at least 500 members and an unknown loss of potential members as new physicians failed to join.

Practicality has a way of diminishing philosophic barriers, however, and again, by 1990, KMS members came together from their varying points of difference to call for the elimination of unification, and Resolution 90-13 was born. How many who have been active members feel relief from this action is unknown. But, of course, the maintenance department is eager to see the number of physicians who, having left the fold, claiming any of the several reasons for the action, will now return to give their support and expertise to the organization. Since the annual meeting when the action was taken, the response has been modest, though not discouraging and, as in elections, early returns warrant only cautious attention. Our comments are still largely preaching to the choir, but it won't hurt for the choir to recruit some members to sing to. D.E.G.

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The debate and dialogue concerning the future of the American health care system continues. One can hardly pick up a medical journal these days and fail to read the title of an article relating to reform of health care delivery in our country. At the same time, there is emerging a growing awareness in the medical community that the field of preventive medicine is changing into a discipline with a new focus towards health maintenance. It is my view that if we link these two issues, we may well be able to devise a health care system that does not demand a large infusion of new dollars.



In July 1990, the Council on Scientific Affairs of the American Medical Association endorsed and highlighted a 225-page Institute of Medicine report entitled "The Future of Public Health." This report emphasized the accomplishments in reducing morbidity and mortality for many diseases, including heart disease and stroke. It points out, however, that much work remains in improving the quality of the health of our people and urges that public health officials and private practitioners cooperatively promote an increased attention to public health issues. In addition, a separate report has been issued by the U.S. Preventive Services Task Force, which provides recommendations for clinical practice on 169 interventions for the prevention of 60 target conditions. This report emphasized the role of personal health practices of our patients as among the most effective interventions available to reduce the incidence and severity of leading causes of disease and disability. It was estimated that by adopting healthier lifestyles, the American people could prevent between 40 and 70% of the 12 million years of productive life lost each year in the United States.

A recent letter in the correspondence section of the *New England Journal of Medicine* by Dr. George Blackburn stresses that changes in lifestyle offer a more cost-effective approach than pharmacotherapy in many prevalent diseases such as mild-to-moderate hypertension. Dr. Blackburn emphasizes that the methodology is now at hand to allow us to develop specific programs which

would lower the incidence, morbidity and cost of many of our chronic diseases. Perhaps it is time to develop fiscal incentives in our proposed health care programs which would give a tangible, immediate motive to maintain our health rather than the philosophical and detached recommendations that we currently give to our patients to change their diet and health habits. By placing a responsibility for health maintenance upon our patients, we might see a reduction in health care costs that would be acceptable to physicians and patients alike.

This new approach in the field of preventive medicine needs the support of practicing physicians, public health professionals and academic medicine. Most medical schools give only fragmentary and brief periods in medical student education to the discipline of preventive medicine. Despite the fact that the American public is generally well attuned to the benefits of approaches to healthier lifestyles, few attempts have been made to organize this information in a meaningful curriculum for our medical students. Recently, the University of Kansas School of Medicine has taken steps to change the situation. This effort is to be applauded.

The state of Kansas has a great history in the field of preventive medicine, mostly through the pioneering efforts of Dr. Samuel J. Crumbine. There are still bricks in Kansas sidewalks admonishing the citizens to expectorate in appropriate receptacles. The slogan "swat the fly" was used nationally to focus attention on controlling filth in our streets and homes. Unfortunately, for political reasons Dr. Crumbine's career did not fare well in Kansas, and his national leadership qualities were only recognized when he was forced to leave our state for New York, where he achieved a national and international reputation in the field of public health.

Recently, a national report was issued which indicated that more women over the age of 40 are receiving mammography on their initial examinations. Unfortunately, a disappointingly smaller number of women are undergoing this examination on an annual basis. One of the reasons given for the lack of continued compliance with this important preventive medicine proce-

ture was lack of encouragement or support by the physician. Perhaps it is time for Kansas to repay its debt to the late Dr. Crumbine by developing a comprehensive statewide preventive medicine program. That would surely lead to better health for all of our citizens.

Joseph E. Week, M.D.



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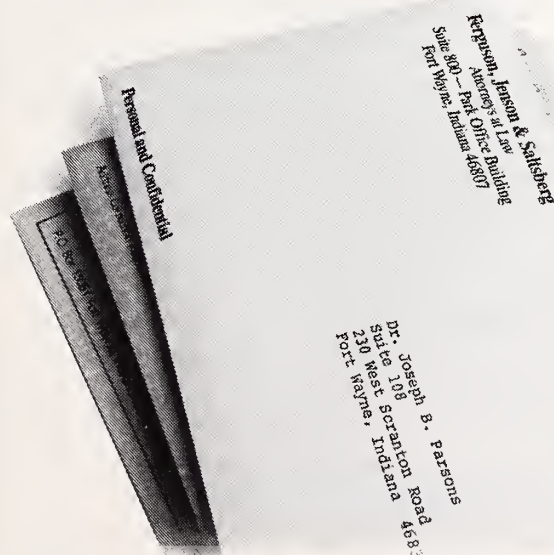
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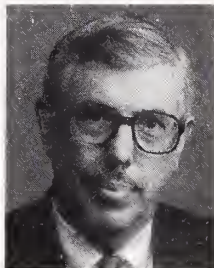
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Gestational Infirmities: The Birth of New Litigation

WAYNE T. STRATTON, J.D.,* *Topeka*

The Kansas Supreme Court recently decided a case clarifying whether Kansas recognizes a cause of action for the wrongful birth of a permanently handicapped child.

Before answering the question certified by the United States District Court, the Supreme Court briefly reviewed Kansas law regarding three types of related malpractice torts. These torts, wrongful pregnancy, wrongful life and wrongful birth, were found by the Court to have evolved because of advances in technology and a recognition of a woman's right to prevent conception or to terminate a pregnancy.



Wrongful Pregnancy

In a suit for wrongful pregnancy, parents who have taken medical steps to prevent pregnancy bring suit for damages caused by a child nevertheless being born, even if that child is born healthy. Kansas and the majority of other states have recognized a cause of action for limited damages for wrongful pregnancy. The Kansas courts, however, have consistently refused to allow damages beyond those suffered prior to and at the birth of the child.

Wrongful Life

The tort of wrongful life constitutes an action brought by an impaired child, whereby the child alleges that, but for the defendant's negligent advice or treatment, the child would not have been born. The impairment is not caused by the de-

"Doctor, will I have a healthy baby?"

fendant; the only negligence is in not determining or informing the parents of the defect before birth. The Kansas Supreme Court has refused to recognize the tort of wrongful life, as have a majority of other states addressing the question.

Wrongful Birth

The tort of wrongful birth differs from the tort of wrongful life in that the suit is brought by the parents, who claim they would have avoided conception or terminated the pregnancy had they been properly advised of the risks or existence of birth defects in the child. In its recent decision, Kansas joined 20 other states in recognizing such an action. The Kansas court did adopt some restrictions which appear to be sound:

- The recovery may only be had for the period of time of the child's life expectancy or until the child reaches the age of majority, whichever is a shorter period. The Supreme Court determined that early common law decisions to the contrary notwithstanding, in this modern age an adult child should no longer be expected to be supported by the parents, even if severely disabled.

- Damages are to be based on those extra expenses caused by the child's disabilities. The normal cost of care of a child is not an element of damage.

The court considered, but did not answer, the question of how to deal with the situation where a parent recovers damages and does not then provide the care for the child. The court suggested the use of a reversionary trust whereby the money could be returned to the defendants if not used for the support of the child. Two justices, in their concurring opinions, would have engrafted such a requirement upon the cause of action.

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

(Continued on page 253.)

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MEDICINA ET LEX

(Continued from page 250.)

The implications of this decision for physicians who deliver babies can be significant. The court does not discuss the extent of a physician's duty to either identify the possibility of birth defects in the child or advise patients of such a possibility. The court merely assumed, for purposes of answering the question, that the defendants were negligent, that the gross defects of the child could have been determined by appropriate testing prior to birth; that defendants owed plaintiffs a duty to perform such tests; and that no such tests were offered or performed, or if performed, were negligently performed.

While the extent of such a duty should be a question involving the standard of care based upon the practices followed by other physicians in the same or similar communities, it is likely that plaintiffs will claim in such cases that there were discussions with the physician regarding the possibility of birth defects. Physicians must be aware of the implication of such statements in the medical history. Any indication of the need for testing should be aggressively explored and documented.

Cases from other jurisdictions have found that a physician owes a duty to:

- Provide adequate genetic counseling and prenatal testing in light of each patient's family history.

- Make reasonable disclosure of the diagnosis and warn the patient of the risks which are reasonably foreseeable of each alternative treatment or test, or the risk of no treatment at all. Generally, physicians are not required to inform patients of each infinitesimal, imaginative or speculative element that would go into making up such risks. The extent of disclosure under Kansas law is measured by what a reasonable physician would disclose under the same or similar circumstances.

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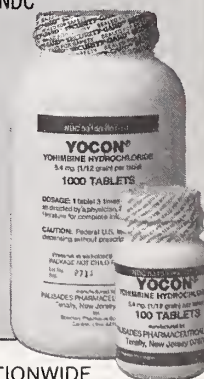
Dosage and Administration: Experimental dosage reported in treatment of erectile impotence.^{1,3,4} 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.³

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References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical Letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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The Nursing Home Reform Act

PATRICIA A. MABEN, R.N., M.N.*

On October 1, 1990, the most comprehensive revision to date of the federal requirements for nursing homes took effect. The Nursing Home Reform Act was passed by Congress in December 1987. This latest legislation should have a positive impact on the quality of care received by residents in the nation's nursing facilities.

In 1983, the Health Care Financing Administration (HCFA) requested that the Institute of Medicine (IOM) conduct a study which would serve as a basis for revising the policies and procedures governing the certification of nursing homes.¹ There was a broad consensus that government regulation of nursing homes was unsatisfactory because it allowed too many marginal or substandard homes to continue to operate. The implicit goal of the regulations for certification was to ensure that any resident in a certified nursing home would receive appropriate care, be treated with courtesy and enjoy continued civil and legal rights. In most nursing homes this was true, but in many others the care was inadequate. This substandard care hastened the deterioration of residents' physical, mental and emotional health.

In the past 15 years, there have been many changes in the care of elders. A better understanding has been developed of what is meant by high-quality care for nursing home residents and how to provide it.² Assessment of residents, development of effective quality assurance systems and the growth in professionalism in the nursing home industry have made it possible to redesign the regulatory system to assure that all nursing homes provide care of acceptable quality.

The Nursing Home Reform Act redefined the terminology used to describe nursing homes. Skilled nursing facilities (SNFs) will provide services to those residents who are eligible for services under Medicare, and "nursing facilities" will provide services to residents under the Medicaid program. The term "intermediate care facility" will no longer be used. This change recognized the increased complexity of care residents receive and

*Consultant Nurse, Bureau of Adult and Child Care, Kansas Department of Health and Environment, Topeka.



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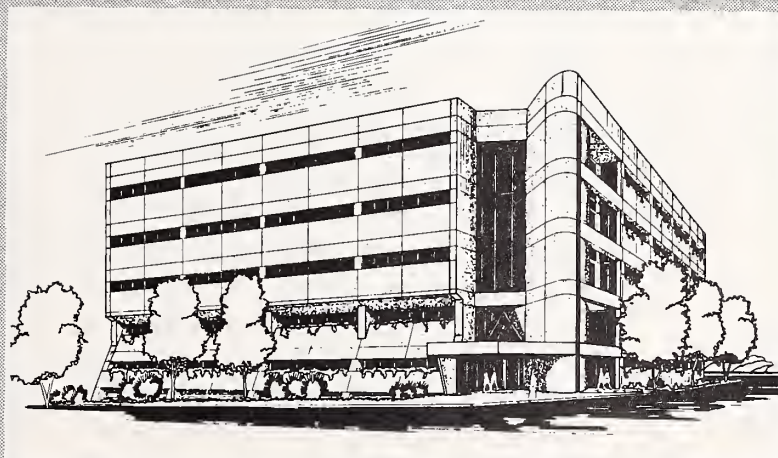
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the similarity in the care needs of residents in skilled and intermediate facilities.

The most important result of this change in definition of nursing facilities was the requirement that all nursing facilities must be staffed with licensed nurses 24 hours a day. A number of studies have indicated that the quality of care delivered to nursing facility residents was directly proportional to the number of hours of licensed nursing care per resident day.³ Provisions have been made in the regulations for facilities that are unable to meet this requirement. However, those facilities that cannot meet this regulation must ensure that the residents in their facilities will not be adversely affected by the lack of licensed nurse supervision. This will mean that some facilities will not be able to admit or continue to care for residents who have or develop complex care needs.

The following statement in the regulations can be considered a summary of the goal of these new regulations:

Each resident must receive and the facility must provide the necessary care and services to attain or maintain the highest practicable physical, mental, and psychosocial well-being in accord-

ance with the comprehensive assessment and plan of care.⁴

The survey process based on these regulations will evaluate the care provided to residents, rather than determining whether or not the facility has met a variety of procedural or "capacity" requirements. Surveyors will be reviewing standardized assessments. They will be considering whether the plan of care has been followed and evaluating the effectiveness of that care. It is assumed that a resident's level of functioning will remain the same and in most instances improve. In those instances where the level of functioning has decreased, the clinical record will be reviewed to determine if the physician and facility staff have indicated that the decline in functioning has been a result of normal progression of the disease process.

An example of a finding which would lead to a finding of noncompliance was identified in a recent survey. Two weeks prior to the survey, a resident was admitted from a hospital to a Medicare unit in a nursing facility. The assessment on admission indicated that the resident was ambulatory with assistance, continent of urine, oriented and alert and able to assist with part of her care. At the time of the survey this resident was observed to be restrained in a wheelchair, unable to walk, reported by staff to be incontinent, needing assistance with feeding and was observed to be "confused." Nothing in the clinical record indicated a medical reason for her decline in physical and mental functioning. So the facility would be found deficient in the care provided to this resident.

The rights of residents have been expanded. The major areas affecting physicians are those rights that pertain to physical and chemical restraints. Physical restraints are not to be employed unless other avenues of care have been unsuccessful. A number of studies during the last 10 years have indicated that physical restraints can be more detrimental to residents than the risks of falling and/or wandering.^{5,6} A number of facilities are now using "restraint-free" strategies. The guidelines for the use of chemical restraints will be published in the near future. It is anticipated that these guidelines will require documentation by facility staff and the attending physician to justify the use of chemical restraints. Activities such as wandering will no longer be accepted as a reason for using a psychoactive drug. Facility staff and attending physicians will need to work together to develop care strategies which provide environments in which residents can function



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The schedule for physician visits will be changed in the new regulations. Those residents whose care will be reimbursed under the Medicare system are to be seen by their physician every 30 days for the first 90 days after admission and every 60 days thereafter. All other residents are to be seen every 30 days during the first 90 days of admission and every 90 days thereafter. Physicians will have the option of alternating their personal visits to residents with a physician assistant or advanced registered nurse practitioner. However, only the attending physician may see the resident on the first 30-day visit after admission.⁴

Each nursing facility will be required to have a medical director. The medical director will be responsible for "implementation of resident care policies and coordination of medical care in the facility."¹ Previously, only skilled nursing facilities were required to have medical directors, but as of October 1, 1990, all nursing facilities will have to meet this requirement.

The next year will be a difficult period for nursing facilities as staff members implement the requirements of these new regulations. Ideally, attending physicians and the administrative staff of facilities will work together in this implementation. The major concept which must be kept in mind is that these regulations were developed to assure that all residents in nursing facilities receive the quality care they need. If all parties involved in resident care keep this thought in mind, this goal should be realized.

REFERENCES

1. Institute of Medicine. *Improving the Quality of Care in Nursing Homes* (Washington, D.C.: National Academy Press, 1986).
2. Ouslander J. Medical care in the nursing home. *JAMA* 262:18;2582-90.
3. Nyman J. Improving the quality of nursing home outcomes. *Medical Care* 26:12;1158-71.
4. Health Care Financing Administration. Conditions of participation and requirements for long-term care facilities. *Federal Register* 54:21;5359-71.
5. Dube A and Mitchell E. Accidental strangulation from vest restraints. *JAMA* 256:19;2725-26.
6. Francis J. Using restraints in the elderly because of fear of litigation. *NEJM* 320:13;870-71.



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Erythromycin and Gastroparesis

ROLAND B. CHRISTIAN, M.D.,* AND ALLAN R. COOKE, M.D.,* *Kansas City*

Refractory gastroparesis is a challenging clinical problem for which treatment is difficult. Recent work with the macrolide antibiotic erythromycin has defined its role as a motilin agonist and a potent prokinetic agent. Studies in diabetic gastroparesis have demonstrated a marked improvement in gastric emptying with intravenous erythromycin. We report two patients with refractory gastroparesis, one due to unknown causes and the other as a result of vagotomy and partial gastrectomy. Both responded very well to oral erythromycin and continue in good health with normal gastric emptying. The mechanisms of control of gastric emptying and the mode of action of erythromycin are discussed.

Introduction

Gastroparesis is a motility disorder characterized by slowed emptying of food. Symptoms associated with gastroparesis include nausea and vomiting, postprandial bloating, fullness and early satiety. Treatment of gastroparesis is often difficult, since no drug or class of drugs is uniformly effective or tolerated. The antibiotic erythromycin has recently been shown to be useful in treating diabetic gastroparesis by acting as an agonist of the gastrointestinal hormone motilin.^{1,2} Erythromycin has been shown to bind receptors of the hormone motilin present in the stomach and upper intestinal tract.³ It has been used intravenously, but as yet there have been no studies of oral erythromycin in managing slowed emptying. Furthermore, prior studies were in diabetic gastroparesis only. The present study reports the use of oral erythromycin in one patient with idiopathic gastroparesis and another with postgastrectomy gastroparesis. Both had been refractory to all treatment.

Case 1

A 42-year-old white male with a 20-year history of nausea and vomiting began experiencing a pro-

gressive increase in symptoms accompanied by weight loss and gradual reduction of oral intake. There was no family history of impaired intestinal motility. He had no evidence of intestinal pseudo-obstruction, latent diabetes, connective tissue disease, mechanical obstruction or of medications which slow gastric emptying. Several gastric emptying times, following a mixed solid/liquid meal, were markedly prolonged. The times ranged from 600 to 1500 minutes (normal 66 ± 32 min). The patient had experienced several episodes of severe nausea and vomiting, leading to dehydration and metabolic alkalosis requiring hospital admission. Additional motility studies demonstrated a hypomotile esophagus, a decreased lower esophageal sphincter resting pressure and an impaired antroduodenal motility, confirming a diagnosis of idiopathic gastroparesis.

The patient's medical management included trials of metoclopramide, bethanechol and combinations with the antiemetic prochlorperazine (Compazine). Additional pharmacologic therapy was attempted with the use of the investigational agents domperidone (a dopamine agonist) and cisapride, which acts by facilitating acetylcholine release. Cisapride therapy did reduce the nausea and vomiting, but not sufficiently to allow resumption of oral intake. Because of persistent weight loss and refractory nausea and vomiting, a gastrostomy tube was placed with an extension tube into the proximal jejunum. Gastric suctioning could then be performed during slow jejunal feedings. The patient tolerated jejunal feedings well, indicating a normal-functioning distal small bowel and colon.

Recently, the patient was admitted for hydration because of persistent nausea and vomiting. A small bowel barium study revealed no mechanical obstruction. Gastric emptying time after mixed solid/liquid meal was markedly prolonged (1500 minutes). The patient was then given erythromycin 500 mg IV every six hours for three days. His nausea and vomiting improved markedly. The intravenous erythromycin was changed to erythromycin ethyl succinate (EES) elixir in a dose of 300 mg every six hours via the gastrostomy tube. A repeat gastric emptying time after EES therapy

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was normal (52 min). The patient tolerated a limited oral intake and, subsequently, his intake improved sufficiently to allow removal of the feeding tube.

Case 2

A 47-year-old male presented with a progressive history of nausea, vomiting, early satiety and epigastric discomfort. He had undergone an antrectomy and vagotomy in 1982 for a gastric ulcer. Because of a stomal ulcer, this was revised three years later, at which time an incomplete vagotomy was discovered. A Bilroth II gastrectomy and complete vagotomy was done. He remained well until two years after this revision, when he returned with symptoms of epigastric discomfort due to nonsteroidal therapy. Endoscopy revealed marked endoscopic gastritis and a bezoar. His stoma was slightly narrowed and easily dilated to 2 cm. Subsequent endoscopies revealed bezoars and a widely patent stoma. He was treated with an H₂ blocker, metoclopramide up to 80 mg/day, bethanechol 60 mg/day, and a low-fiber diet. Despite this intensive therapy, he still had retained gastric contents after 18–36 hours of fasting. A gastric emptying time on full therapy was greater than 400 minutes (normal 66 ± 32 minutes).

He was treated with erythromycin 250 mg tid orally, with rapid relief of symptoms. He is currently receiving no other therapy for his delayed gastric emptying, apart from erythromycin 250 mg bid. A repeat gastric emptying time was normal (45 minutes).

Discussion

Both of these patients had significant gastroparesis, one with idiopathic gastroparesis and the other as a result of partial gastrectomy and vagotomy. These patients responded to oral erythromycin, a known motilin agonist, despite resistance to all other standard treatment.

Gastric emptying is mediated by myogenic, neural and hormonal mechanisms. The myogenic component is, of course, the muscular walls of the stomach, of which the antrum is the major component. The antrum mixes and breaks up food particles to less than 1 mm in size and delivers them in a controlled fashion to the duodenum. Liquid emptying is believed to be controlled primarily by the fundus and the body of the stomach. The intrinsic neural plexi of Auerbach and Meissner coordinate this activity, aided by the extrinsic autonomic nervous system as well as hormones. Vagal cholinergic fibers (acetylcholine is the

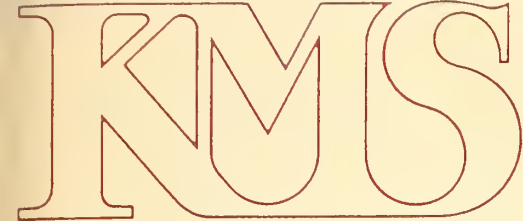
“These patients responded to oral erythromycin, a known motilin agonist, despite resistance to all other standard treatment.”

transmitter) tend to stimulate emptying. The vagi also carry non-cholinergic, non-adrenergic fibers (transmitter unknown) which relax the fundus of the stomach and the sphincters (pyloric, cardioesophageal, etc.). The sympathetic fibers (the transmitter is norepinephrine) act predominantly to inhibit gastric emptying.

The hormones involved in the control of emptying act generally to inhibit emptying, with the exception of motilin, which acts to promote emptying. Secretin, cholecystokinin (CCK), gastrin and gastric inhibitory peptide, etc., inhibit gastric emptying, but it is likely that only CCK does so physiologically. Hormones as well as neural mechanisms are mediators of receptors found in the duodenum and proximal jejunum. These receptors respond to the presence of acid, fatty acids, amino acids, peptides, sugars and L-tryptophan in the duodenum and the proximal small intestine and inhibit emptying via hormonal and neural reflexes. Thus, the natural tendency for the stomach is to empty gastric contents rapidly, but this effect is slowed by inhibitory mechanisms present in the proximal small bowel.

There is another important mechanism involved in emptying of non-digestible foodstuffs. This mechanism is known as the interdigestive migrating motor complex (MMC) and has four phases, of which phase III is the most important. Phase III of the MMC clears the stomach and small bowel of residual particles as well as fiber and other indigestible foods. Motilin is believed to play an important role in the onset of phase III of this migrating motor complex.^{4,5,6}

Motilin is a 22-amino-acid linear peptide found chiefly in the enterochromaffin cells of the proximal small intestine. The mucosal cells of the antrum and duodenum contain the highest concen-



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KMS COUNCIL ENDORSES HCSF PHASEOUT

On September 29, the Council of the Kansas Medical Society adopted a policy position that the state Health Care Stabilization Fund (HCSF) should be phased out upon adequate financing of unfunded liabilities, presumably in 1994. The action by the Council follows two years of study of this issue by legislative committees.

There are two primary reasons why the KMS has not previously endorsed the phaseout concept until now. First, because of a quirk in the original 1976 law, the Insurance Commissioner was prohibited from collecting sufficient revenues to adequately finance estimated liabilities of the HCSF. This was corrected in 1984, but by then a substantial deficit had accrued. Now it appears that the fund balance should be sufficient by 1994.

The second reason for reluctance was concern about "tail" coverage. Such indemnity for prior acts is needed only if a physician discontinues practicing in Kansas or changes insurance companies. Most companies will not indemnify a policyholder for incidents that occurred when the policyholder was insured by a different company (in this case the HCSF). Now, however, because of the creation of KaMMCO by the Kansas Medical Society, the availability of continuous, claims-made liability coverage is assured.

This makes possible the transition from the Health Care Stabilization Fund to a private medical malpractice insurance market without the imposition of a substantial special assessment on all physicians and hospitals for tail coverage under the HCSF. It will also be possible to repeal the mandatory requirement that physicians purchase liability insurance as a condition of licensure.

MAMMOGRAPHY SCREENING

Physicians are key motivators of women to use mammography, according to a recent MMWR report. "Nationally, breast cancer is the most common form of cancer in women," according to Stanley C. Grant, M.D., Secretary of the Kansas Department of Health and Environment, in announcing that October was National Breast Cancer Awareness Month. "In 1990, 1,600 Kansas women will be diagnosed with breast cancer, and 475 will die from the disease," says Dr. Grant. (See the article "Urge Your Patients to Have Mammograms," on page 268 of this month's Kansas Medicine.)

DEATH CERTIFICATE DOCUMENTATION OF PREGNANCY

The KMS Maternal Health Committee, chaired by William T. King, M.D., urges physicians to document pregnancy on the death certificate. The committee's study last year confirmed that

pregnant women in Kansas die of rare and unusual complications of pregnancy. Often, the names of these decedents come by way of the "grapevine," rather than being documented on the death certificate. Please document carefully a recent or concurrent pregnancy as you prepare death certificates for women of childbearing age.

BEST MEDICATION FOR HYPERTENSION IN BLACKS IS IDENTIFIED

One out of every four Americans has hypertension, but one in every three black Americans is affected. Twenty-five percent of the black population has uncontrolled hypertension, and the figure is even higher for black men. Hypertension appears at an earlier age in blacks than in non-blacks--it is almost twice as common in 35- to 45-year-old blacks. Worst of all, serious complications from hypertension are more frequent in this group, including a 66% greater incidence of stroke, 17.7 times greater occurrence of renal disease and 4.2 times more end-stage kidney disease.

Such statistics prompted a study aimed at identifying the best medication for blacks with hypertension. The results, published in the July 1990 issue of Archives of Internal Medicine, show that verapamil SR was significantly more effective at lowering blood pressure than the two other most commonly prescribed medications. Overall, 73% of patients responded favorably to verapamil SR, compared to 59.6% with atenolol and 57.1% with captopril.

NEW OFFICERS OF NMA

A Detroit surgeon, Alma Rose George, M.D., has been chosen President-Elect of the National Medical Association. Dr. George is medical director of Patient Care Management Systems for Wayne County (Detroit), and president of the medical staff of Samaritan Hospital, Detroit. Dr. George has served on the Michigan State Board of Licensure and Registration. She is a delegate to the Wayne County Medical Society and the Michigan State Medical Society, and has been president of the Detroit Medical Society and the statewide Wolverine Medical Society. Dr. George is NMA's third woman president-elect. This year's President of the NMA is Dr. Charles Johnson, of Duke University, Durham, North Carolina.

AMA CONDUCTS SURVEY OF RESIDENCY PROGRAMS

In 1989, for the fourth consecutive year, available positions in U.S. residency programs exceeded the number of applicants, according to a recent report in JAMA. Unfilled positions increased by 27% between 1988 and 1989, apparently due to a decline in the number of graduates of accredited medical schools.

An estimated 85,330 residents were on duty in the 1989-90 academic year, two-fifths of whom were trained in internal medicine, family practice or pediatrics. Twenty-nine percent of all medical trainees in 1989 were female, comparable to previous years. More than three-fifths of women residents were training in family practice, internal medicine, obstetrics/gynecology, pediatrics or psychiatry.

Nationwide, the percentage of residents who are black also has not changed much in recent years. Black non-Hispanic

residents made up 4.5% of the total number receiving training in 1989. The 1989 survey also indicates a continued decline in the number of residents who attended foreign medical schools. Foreign medical school graduates (FMGs) comprised 17% of the residents on duty in 1989. Child neurology had the highest concentration of FMG residents (44.9%), and orthopedic surgery the lowest (1.1%).

Program directors were surveyed about restrictions on the amount of time residents could stay on duty. Five surgical specialties (general, neurological, pediatric, vascular and thoracic) reported average on-duty time in excess of 80 hours per week in the first year of training. Nine other specialties reported averages between 70 and 80 hours per week on duty.

OFFICE MANAGEMENT: TELEPHONE TECHNIQUES

Your office staff's telephone techniques can greatly enhance or detract from a successful physician-patient relationship. The telephone, usually the first contact between the patient and the physician, represents your office and establishes the attitude of your office staff. It is a vital public relations tool. But telephones can be a source of frustration when callers get busy signals and repeatedly cannot reach the doctor.

Your office staff can prevent some of this frustration. Each member of your staff should speak clearly and project a positive attitude and pleasant phone personality. The staff should be sympathetic and understanding. Remember that patients who call can be anxious or frightened and are seeking information, so responses should be informative and complete. Avoid giving dead-end replies. Following are some techniques your staff can use to assist callers:

- * Answer the phone within the first two or three rings;
- * Identify the office slowly and clearly so the caller knows he or she has reached the intended party;
- * Identify who is speaking;
- * Speak clearly and distinctly. Haste in answering or "Doctors' office, will you hold, please? - Click!" exemplifies poor technique and overloaded telephone lines;
- * Always inform callers when you are putting them on hold; and
- * Always use the telephone hold button instead of dropping the receiver on the desk.

KMS WORKERS' COMP PROGRAM REFUND

Participants in the Kansas Medical Society-sponsored Workers' Compensation Program received a refund of 10% on premiums paid last year. This refund was in addition to the up-front discounts received when the policies were written. If you are interested in receiving information about this program, call the Dodson Group at 1-800-825-3760.

FDA REPORTS SURVEY RESULTS

Last fall the Food and Drug Administration requested suggestions that would help its administrators plan appropriate programs for the next five to seven years. The FDA recently published the results of their survey, which consisted of approximately 1,000 suggestions from state officials, busi-

ness owners, trade association representatives, consumers, health care professionals and others. Among health care professionals, 58% wanted FDA to "do more," and 6% asked the agency to "do less." There were 30 suggestions from health care professionals to initiate new programs, including the following:

- * Focus priority on drugs and devices with high therapeutic impact;
- * Establish a drug information center to provide more timely information to health professionals when drugs are recalled;
- * Network more closely with state and local public health agencies.

Several groups, including health care professionals, recommended that the FDA find ways to speed up new product approval, in particular to cut red tape and simplify their approval process. These groups also suggested making available information on recalls and new product innovations. They urged the FDA to increase its inspections of food and drug products coming from other countries and to monitor pesticide residues in imported products. Consumers requested that the FDA require standardized labeling of fat and cholesterol content in foods labeled "low-fat" or "lite," and help define terms such as "natural" and "organic."

After considering the suggestions made during the survey, the FDA is now determining how to incorporate them within prevailing budget restrictions.

CONGRATULATIONS

...To William J. Reals, M.D., Vice Chancellor and Dean, UKSM-Wichita, who has been re-elected chairman of the AMA Council on Medical Education.

...And to Lisa Ann Burns of the KMS Medical Student Section and a student at the medical school in Kansas City, who has been named to the AMA's Women in Medicine Advisory Panel for 1990-91.

ALZHEIMER'S MONTH

November is National Alzheimer's Disease Month, which demonstrates the continued national commitment to finding the cause(s), cure and eventual treatment of the disease, while enhancing public awareness. Information may be obtained from the Alzheimer's Association, 70 E. Lake Street, Suite 600, Chicago, IL 60601; telephone 312-853-3060.

HEY, MAN, LET'S GO GET SOME POPPY SEED BAGELS

A St. Louis policeman with a fondness for poppy seed bagels nearly lost his job recently when a random drug test indicated the presence of morphine. Although he had had a good record during his 21-year career on the police force, he was suspended. At his departmental hearing, he maintained his innocence, but theorized that the four poppy seed bagels he had eaten the day prior to the test might have affected the results. And when a subject was tested after eating poppy seeds, the results were the same. The police department reinstated the officer and plans to check for poppy seed consumption if future drug tests of others suggest morphine use.

tration of motilin receptors. Receptors are also found in the jejunum and ileum. The entire molecule (MW 2700) is needed for its full biologic action. Vagotomy causes a 10-fold decrease in sensitivity to exogenously administered motilin. Removal of large numbers of motilin receptors via antrectomy in dogs does not affect the MMC activity induced by exogenous motilin.⁷

Erythromycin is a macrolide antibiotic which in vivo induces MMC activity in the stomach and proximal small bowel. Peeters and co-workers have demonstrated in vitro erythromycin binding to motilin receptors and an ensuing MMC motor pattern in the dog, rat and human duodenum.⁸ Contractile activity with erythromycin was about 1000-fold less than with motilin at similar molar concentrations. These studies demonstrate that erythromycin, albeit less potent, is a motilin agonist of upper intestinal smooth muscle.

The motor activity induced by erythromycin is seen also with 14-member ring macrolide antibiotics. Macrolides with 12- and 16-membered rings do not induce the motor activity, although they have a similar antimicrobial spectrum. The erythromycin dose necessary for motor activity induction in the proximal gut (40 mg IV) is much lower than the antimicrobial dose.⁸

Vantrappen et al.² found that intravenous erythromycin was a potent prokinetic agent in normal subjects as well as those with diabetic gastroparesis. A dose of 40 mg IV induced strong rhythmic phase III contractions which migrated distally as a normal MMC in both normal and diabetic patients. A dose of 200 mg IV induced only a short burst of phase III contractions followed by a prolonged period of powerful antral peristaltic contractions with no migration to the duodenum and no MMC induction. A 350-mg dose IV induced a weak contractile effect in normal patients and had no effect in diabetic patients. Thus, erythromycin clearly induces phase III motor activity in both normal patients and those with diabetic gastroparesis, and has different effects at different intravenous doses. In further studies in eight patients with severe diabetic gastroparesis, 200 mg IV erythromycin normalized slowed gastric emptying of solids and liquids.¹

The two patients reported in this paper demonstrate that oral erythromycin is effective, as has been established for intravenous administration. Furthermore, it is effective in slowed emptying states other than diabetic gastroparesis. In case 2, the surgical removal of the antrum and a vagotomy did not prevent the effectiveness of eryth-

romycin, despite reduced sensitivity of motilin receptors after vagotomy and the removal of some motilin receptors by antrectomy.

REFERENCES

1. Janssens J, Vantrappen G, Urbain JL, et al. The motilin agonist erythromycin normalizes impaired gastric emptying in diabetic gastroparesis (abstract). *Gastroenterology* 1989;96:A237.
2. Vantrappen G, Janssens J, Tack J, Muls E, Bouillon R, Peeters T. Erythromycin is a potent gastrokinetic in diabetic gastroparesis (abstract). *Gastroenterology* 1989;96:A525.
3. Peeters T, Matthijs G, Depoortere I, Cachet T, Hoogmartens J, Vantrappen G. Erythromycin is a motilin receptor agonist. *Am J Physiol* 1989;257:G470-74.
4. Hall KE, Greenberg GR, El-Sharkawy TY, Diamant NE. Relationship between porcine motilin-induced migrating motor complex-like activity, vagal integrity, and endogenous motilin release in dogs. *Gastroenterology* 1984;87:76-85.
5. Vantrappen G, Janssens J, Peeters TL, Bloom SR, Christofides ND, Hellemans J. Motilin and the interdigestive migrating motor complex in man. *Dig Dis Sci* 1979;24:497-500.
6. Sarna S, Chey WY, Condon RE, Dodds WJ, Myers T, Chang T. Cause-and-effect relationship between motilin and migrating myoelectric complexes. *Am J Physiol* 1983;245:G277-84.
7. Walsh JH. Gastrointestinal hormones. In *Physiology of the Gastrointestinal Tract*, ed. by Johnson LR. Vol I, Chapter 7 (New York: Raven Press, 1987).
8. Itoh Z, Suzuki T, Nakaya M, Inoue M, Arai H, Wakabayashi K. Structure-activity relation among macrolide antibiotics in initiation of interdigestive migrating contractions in the canine gastrointestinal tract. *Am J Physiol* 1985;248:G320-25.

Council District Meeting Calendar

District 10 Mon., Nov. 5	Old Mill Restaurant Newton
District 7 Tues., Nov. 6	Flint Hills Country Club Emporia
District 16 Tues., Nov. 13	Colby (location to be announced)
District 9 Tues., Nov. 20	Cavalier Club Salina
Districts 2 & 3 Tues., Nov. 27	Kansas City Milburn Country Club

Anesthesia Mishaps

ANTHONY L. KOVAC, M.D.,* *Kansas City*

The first anesthesia mishap reportedly occurred in January 1848 when 15-year-old Hannah Greener died during a chloroform anesthetic given for a toenail removal.¹ Today, with a more educated public and high standards of care, expectations have changed dramatically. An anesthetic accident or death is rarely accepted as fate. Also, a risk is no longer acceptable if it leads to loss of life or major impairment as a result of technical or human failure, especially when such failure is thought to be avoidable.²

Presently, there is a medical malpractice crisis in the State of Kansas and the nation. Rising economic costs and emotional loss are important considerations. In a 1983 National Association of Insurance Commissioners closed claims study, anesthesiology as a specialty had 3% of total claims but 11% of total indemnity dollars.² By studying the causes of anesthesia mishaps, solutions to prevent them may be found.

Incidence of Anesthesia Mishaps

Anesthetic morbidity and mortality can be difficult to determine. Mortality is easier than morbidity to determine and quantify. Morbidity is often not reported, but instead is covered up or neglected.³ Bias can occasionally be a factor, with difficulty in separating direct anesthesia-related problems from the surgery for which the anesthesia was required.⁴

Methods of study to gather information about anesthesia may include anecdotal tales, in-hospital audit and peer reviews, reports to medical protective societies and retrospective and prospective studies.⁵ Anecdotal stories involve rare tales that bear little relevance to day-to-day practice. It is often difficult to quantitate the frequency of day-to-day events. With in-hospital audit and peer review, records are often incomplete or absent. With reports to medical protective societies, physicians are encouraged to report incidents to societies and insurance companies, and in doing so

physicians may need medical-legal advice.⁵ Retrospective studies are frequently used; however, underreporting may occur. A low incidence of complications may require multicenter studies to obtain larger sufficient numbers. Limitations of retrospective studies include failure to record significant events at the time of occurrence and lack of knowledge as to what is important at the time of recordmaking.⁵

Beecher and Todd in 1954 completed one of the first prospective studies and reported an overall anesthesia death rate of 1 in 1,560.⁶ This study was controversial because it concluded that when a muscle relaxant (such as curare) was added to an anesthetic, the death rate increased. The implication was that these drugs caused deaths.^{1,5} A follow-up study by Dripps in 1961 refuted this conclusion and also saw no contribution of either spinal or general anesthesia.^{7,8} Early in this decade, estimates of U.S. direct anesthesia-related mortality ranged from 1 per 10,000 to 1 per 2,000.¹ In a recent British National Health Service study, the rate was 1 per 185,000.^{1,9} Current U.S. anesthesia mortality is felt to be less than 1 per 200,000.¹ Overall, as fact-finding methods are frequently inadequate and record-keeping scarce, we can estimate, but really do not know, the true incidence of anesthesia mishaps.^{2,10}

Causes of Anesthesia Mishaps

According to Jeffrey Cooper of Massachusetts General Hospital, most accidents in anesthesia are due to human error approximately 82% of the time and occur during the middle of the procedure (as opposed to induction and emergence).¹¹ These mishaps are felt to have a preventable factor, and are a complex series of mistakes that add up to a major accident or tragedy.^{11,12}

Factors that correlate with accident proneness include sleep loss, fatigue, boredom, bad habits, stress, distractions, carelessness, poor communication, poor interpersonal relations and inadequate familiarity with the situation and/or technique.^{13,14} A hostile work environment may include cramped work space, poor lighting, noise, a restricted field of view, uncomfortable room

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temperature or exposure to trace anesthetic gases, any of which may increase fatigue, thus predisposing to errors as vigilance is reduced.¹⁵ Unfamiliar situations produce stress due to uncertainty. New people, equipment and/or procedures may be involved. Stress is increased by inadequate preparation or demands on time, poor communication and personality conflicts. Errors in record-keeping may involve an inadequate preoperative workup, or failure to keep good current records or to monitor adequately.¹⁶

Anesthesia mishaps may also result from man's interaction with his machines. Weaknesses of human nature may involve the failure to check, prepare, turn on, monitor and understand equipment. Through an analysis of aircraft accidents and the "critical incident analysis technique,"¹² much has been learned concerning human engineering and ergonomics (the human factors of equipment design). Initially anesthesia equipment developed by the process of accretion, with each feature added upon another step by step, for example, equipment added on shelves above flowmeters. An addition may have appeared appropriate at first; however, in the final arrangement, it may be less than satisfactory from the ergonomic point of view.¹⁷⁻¹⁹

Older models, prior to 1979, suffered from ambiguity of control design with confusing gauges, no standard location for oxygen, and no standard direction of rotation for control knobs. Many of these inconsistencies were eliminated in the 1979 American National Standards Institute (ANSI) Z-79 committee standardization of anesthesia equipment, and were updated by the 1988 American Society for Testing and Materials (ASTM) F-1161-88 standard.^{17,20}

Equipment malfunctions are infrequent, but when they occur they appear to affect the breathing system the majority of the time. Breathing system malfunctions may involve leaks, misconnects, disconnects and foreign-body obstruction, thereby leading to hypoventilation, hypoxia or hypercarbia.^{11,12} Laryngoscope malfunction, esophageal or endobronchial intubation, or premature extubation may also occur.

Prevention of Anesthesia Mishaps

The first step to prevent anesthesia mishaps is vigilance, which is the motto of the American Society of Anesthesiologists. Vigilance is the ability to sustain attention or watchfulness. A vigilant task is one requiring long hours of observation for possibly weak and/or relatively rare signals.^{21,22}

Studies have determined vigilance to be affected by sleep loss, fatigue, sensory inhibition, decreased attention span, altered expectations, decreased motivation and a too-varied sensory environment.²¹⁻²³

Continuous monitoring of infrequent events may lead to loss of vigilance. A *varied* sensory environment decreases the monotony of a monitoring task and increases vigilance. An increase in monitoring task complexity can also improve vigilance (up to a maximum point) or reduce loss of vigilance by increasing motivation and interest. Multi-mode tasks (auditory, visual, tactile) requiring time-sharing behavior (as in anesthesia) do not necessarily result in decreased performance but may help improve performance. However, if the system is *too complex*, the number of errors may increase. The more varied the task, the more frequent may be the errors (ambiguous signals increase errors), as the relationship between stimulus variation and responsiveness appears to be a motivational one.^{23,24}

Two factors affecting performance are fatigue and lack of sleep. Fatigue may develop as a function of prolonged tasks of a monotonous nature, or from changes in diet and the normal circadian cycle rhythm (lack of sleep). Sleep deprivation studies reveal that with sleep loss of 30-70 hours, performance of complex-reasoning tasks declines sharply, short-term memory is lost, single short tasks are handled better than longer ones, and an increased tendency to doze off results.^{25,26} Performance does not return to normal levels until 24 hours of rest and recovery have occurred.²⁵ Time from the last sleep cycle was an important determinant of the ability to perform with less sleep than normal. Activities vulnerable to sleep loss include repetitive tasks, prolonged tasks and tasks lacking in incentive.^{15,26}

Ways to improve vigilance include methods to decrease eye and motor fatigue, such as monitors positioned in the line of sight with equipment controls in easy-to-operate positions.^{18,19} An adequate diet, adequate work/rest (sleep) cycles and limits on the total number of hours worked could all improve vigilance. Cooper has also suggested a relief exchange protocol to be followed when anesthesia personnel are relieved. The relieving personnel should ascertain the situation, the course thus far, and the anticipated course or plan.¹⁶

Vigilance aid devices are very helpful in preventing mishaps. These include oxygen analyzers, low- and high-pressure alarms, end-tidal CO₂ monitors, pulse oximeters, EKG, automatic blood

"The first step to prevent anesthesia mishaps is vigilance, which is the motto of the American Society of Anesthesiologists. . . . Two factors affecting performance are fatigue and lack of sleep."

pressure monitors, respirometers and anesthetic agent monitors.

The best available protection against a hypoxic hazard is an oxygen analyzer, which should be routine for all cases.²⁰ As disconnects of the breathing circuit are the most frequent complication leading to mortality and morbidity, low-pressure alarms, end-tidal CO₂ monitors and pulse oximeters are useful to determine if disconnects occur. End-tidal CO₂ monitors and low-pressure alarms respond rapidly to disconnects, while pulse oximeters have a more delayed response (as the fall in paO₂ may occur later than the fall in pCO₂).²⁷ To comply with the new ASTM F-1161-88 standards, new anesthesia machines must have an oxygen analyzer, a breathing pressure monitor and either a CO₂ or exhaled tidal volume monitor.²⁰ Use of these monitors has helped decrease premiums from some malpractice insurance companies.

To prevent airway disconnects, one should have a high index of suspicion about the airway. One should avoid multiple connections and use of adhesive tape to wrap connections. A push-and-twist motion results in a more secure connection. Also a rising bellows ventilator will not rise if a disconnect occurs.²

To prevent equipment ambiguity, there should be label color coding and size standardization of syringes and ampules. One should check and recheck drug labels before administration. Workspace arrangement and visual displays should be rearranged with both equipment and the surgical field in the same visual field (line of sight). This will increase the number of times each piece of equipment is checked. Improved visibility of controls can also be achieved by rearrangement of

existing components with pressure gauges matched with flowmeters.^{20,28}

Preventive equipment maintenance should be routine and should conform to the ANSI Z-79 and ASTM F-1161-88 standards. One should update equipment, know who checks your equipment (and their qualifications) and maintain adequate record-keeping.²⁹ Information concerning equipment hazards can be obtained from newsletters such as *Health Devices Alert*, *Biomedical Safety and Standards* and publications from the American National Standards Institute.

Finally, one should establish and follow equipment checkout protocols. Failure to do an adequate checkout was cited as the most common cause of anesthesia equipment mishaps.¹¹ The best prevention is to do a thorough checkout at the start of the day and before each procedure. The basic checkout is the same for all machines, but specific steps may differ from manufacturer to manufacturer.^{12,26}

In summary, to prevent anesthesia-related mishaps, Cooper^{11,12,16} recommends (a) using appropriate monitoring and vigilance aids, (b) recognizing the limitations affecting individual performance, (c) knowing and maintaining equipment, (d) obtaining information concerning current equipment hazards, (e) standardizing the routine, (f) organizing the workspace, and (g) establishing and following equipment checkout protocols.

REFERENCES

- A complete list of references is available from the author.*
1. Pierce EC. Anesthesia risk modification: Reducing the incidence of mishaps. *Wellcome Trends in Anesthesiology* 1989;7:3-10.
 2. ASA Patient Safety Program; Park Ridge, Illinois 1984.
 5. Davies JM, Strunin L. Anesthesia in 1984: How safe is it? *Can Med Assoc J* 1984;131:437-41.
 6. Beecher HK, Todd DP. A study of deaths associated with anesthesia and surgery based on a study of 599,548 anesthetics in 10 institutions, 1948-1952 inclusive. *Ann Surg* 1954;140:2-35.
 7. Dripps RD, Lamont A, Eckenhoff JE. The role of anesthesia in surgical mortality. *JAMA* 1961;178:261-66.
 11. Cooper JB, Newbower RS, Long CD, McPeck B. Preventable anesthesia mishaps: A study of human factors. *Anesthesiology* 1978;49:399-406.
 16. Cooper JB, Long CD, Newbower RS, Phillip JH. Critical incidents associated with intraoperative exchange of anesthesia personnel. *Anesthesiology* 1982;56:456-61.
 17. Rendell-Baker L. Problems with anesthetic gas machines and their solutions. *Int Anesth Clin* 1981;19:1-82.
 20. Minimum performance and safety requirements for components and systems of anesthesia gas machines, (ASTM F-1161-88) American Society for Testing and Materials, Philadelphia, 1988.
 21. Frankmann JP, Adams JA. Theories of vigilance. *Psychological Bulletin* 1962;59:257-72.

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References

1. *USP DI Update*, September/October 1988, p 120.
2. *Br J Clin Pharmacol* 1985;20:710-713.
3. Data on file, Lilly Research Laboratories.
4. *Scand J Gastroenterol* 1987;22(suppl 136):61-70.
5. *Am J Gastroenterol* 1989;84:769-774.

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Carcinogenesis, Mutagenesis, Impairment of Fertility—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high-dose males as compared with placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high-dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement as compared with concurrent controls and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given

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an excessive and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery are not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, mouse lymphoma assay, chromosome aberration tests, and a micronucleus test.

In a two-generation, perinatal and postnatal fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

Pregnancy—Teratogenic Effects—Pregnancy Category C—Oral reproduction studies in rats at doses up to 300 times the human dose and in Dutch Belted rabbits at doses up to 55 times the human dose revealed no evidence of impaired fertility or teratogenic effect; but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus, and at 50 mg/kg, it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nursing Mothers—Studies in lactating women have shown that 0.1% of an oral dose is secreted in human milk in proportion to plasma concentrations. Because of growth depression in pups reared by treated lactating rats, a decision should be made whether to discontinue nursing or the drug, taking into account the importance of the drug to the mother.

Pediatric Use—Safety and effectiveness in children have not been established.

Use in Elderly Patients—Healing rates in elderly patients were similar to those in younger age groups as were the rates of adverse events and laboratory test abnormalities. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

Adverse Reactions: Clinical trials of varying durations included almost 5,000 patients. Among the more common adverse events in domestic placebo-controlled trials of over 1,900 nizatidine patients and over 1,300 on placebo, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common with nizatidine. It was not possible to determine whether a variety of less common events was due to the drug.

Hepatic—Hepatocellular injury (elevated liver enzyme tests or alkaline phosphatase) possibly or probably related to nizatidine occurred in some patients. In some cases, there was marked elevation (>500 IU/L) in SGOT or SGPT and, in a single instance, SGPT was >2,000 IU/L. The incidence of elevated liver enzymes overall and elevations of up to three times the upper limit of normal, however, did not significantly differ from that in placebo patients. Hepatitis and jaundice have been reported. All abnormalities were reversible after discontinuation of Axid.

Cardiovascular—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

CNS—Rare cases of reversible mental confusion have been reported.

Endocrine—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to nizatidine. Impotence and decreased libido were reported with equal frequency by patients on nizatidine and those on placebo. Gynecomastia has been reported rarely.

Hematologic—Fatal thrombocytopenia was reported in a patient treated with nizatidine and another H₂-receptor antagonist. This patient had previously experienced thrombocytopenia while taking other drugs. Rare cases of thrombocytopenic purpura have been reported.

Integumental—Sweating and urticaria were reported significantly more frequently in nizatidine- than in placebo-treated patients. Rash and exfoliative dermatitis were also reported.

Hypersensitivity—As with other H₂-receptor antagonists, rare cases of anaphylaxis following nizatidine administration have been reported. Because cross-sensitivity among this class has been observed, H₂-receptor antagonists should not be administered to those with a history of hypersensitivity to these agents. Rare episodes of hypersensitivity reactions (eg, bronchospasm, laryngeal edema, rash, and eosinophilia) have been reported.

Other—Hyperuricemia unassociated with gout or nephrolithiasis was reported. Eosinophilia, fever, and nausea related to nizatidine have been reported.

Overdosage: Overdoses of Axid have been reported rarely. If overdosage occurs, activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

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Additional information available to the profession on request.



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Elderhostels Make Retirement Exciting

HARRY G. KROLL, M.D.,* *Topeka*

Entering retirement has meant an abrupt shift from the fast track of daily practice to the slower pace of leisure living. But for us the pace has been quickened by the fun and adventure of Elderhostels, which provide travel opportunities wrapped up in an educational package of liberal arts and sciences.

Elderhostels were begun by Martin Knowlton in Boston in 1975. Knowlton believed that adults aged 60 and over would appreciate varied academic programs, and apparently he was right; last year more than 190,000 participants at over 1,000 educational institutions in the United States, Canada and overseas attested to the popularity of this concept. Elderhostel publishes a quarterly catalog of its many courses, including a description of the content and location of each. Participants can select those of interest to them. Course attendance usually numbers 20 to 40 persons in a classroom environment, supplemented by appropriate on-site trips. The instructors are well versed in their subjects and are most enthusiastic teachers — perhaps in part because they are not burdened with the onus of term papers or course credits. The cost of an Elderhostel six-day program averages about \$250. This includes meals and lodging in dormitories or motels, but does not include transportation.

Last year we attended six Elderhostels on a wide range of subjects, including water conservation, the life of Wyatt Earp, and the origin of Indian artifacts — all at the University of Arizona in Tucson. At Longwood College in Virginia, our studies were concerned with plantation architecture, encompassing such related topics as pre-Revolutionary economics and the building techniques and artistic styles of those times. We had the added benefits of visits to plantations constructed in the early 1700s, which included a very spacious and rambling plantation owned and restored by the instructor.

*Address correspondence to Dr. Kroll at 2912 Cedar Cove Court, Topeka, Kansas 66614.

Send your story for "The Days of Our Age" to Susan Ward, Production Editor, Kansas Medicine, 1300 Topeka Avenue, Topeka, Kansas 66612.

"Travel opportunities wrapped up in an educational package of liberal arts and sciences."

In Indianapolis last year, we learned of the environment of the zoo and of its wildlife in a course jointly sponsored by the zoo and Indiana-Purdue University. As we have been fascinated with zoo subjects, in July of this year we made a second zoo trip to an Elderhostel at the Milwaukee County Zoo for an in-depth study of animal management and care, plus zoo planning. We were impressed with behind-the-scenes visits at this 200-acre facility, which has an annual budget of \$13 million.

Those of us who enjoy historical studies appreciated the Elderhostel at Southern Illinois University in Carbondale, a program on the French influence and settlement in the mid-Mississippi Valley. Again, the classroom lectures were supplemented with several visits to historic sites.

We have enjoyed the acquaintance of the many Elderhostel seniors enrolled in these courses. They represent varied occupations and professions, have wide experiences and are frequently avid travelers. For those who would enjoy this type of travel, educational experience and social opportunity, the address of Elderhostel is 80 Boylston Street, Suite 400, Boston, Massachusetts 02116.

This article continues our ongoing series describing the various lifestyles enjoyed by our retired physicians. Let your fellow KMS members know what life is like now that you have retired. Do you enjoy your new lifestyle? What do you do for recreation? Do you have a new career? Is your health good? Did you plan adequately for your retirement? How? What would you do differently if you were planning now to retire? Any of these subjects, plus many more, are fair game for this column. Send us your thoughts today!

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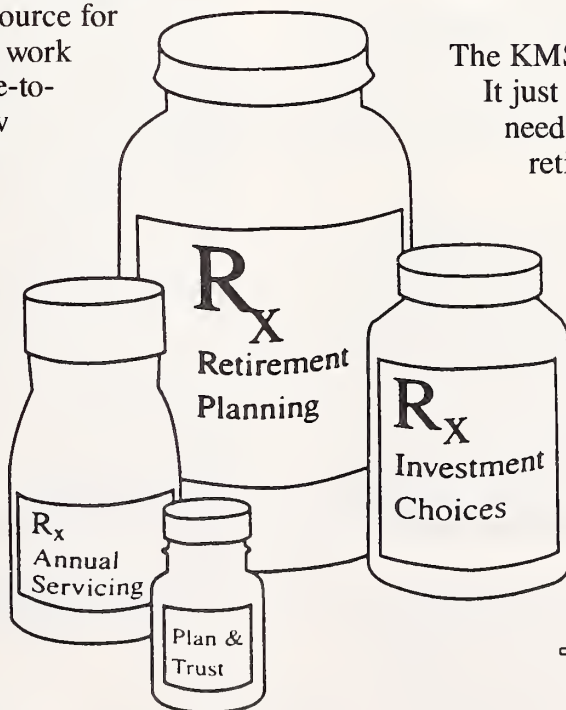
Retirement planning shouldn't be painful. . . but if you're like most physicians, treating your own financial symptoms can be difficult and time-consuming. Knowing your options and opportunities for retirement. . . and then choosing the right plan and funding vehicles are never easy. *And now changes in the tax law require that every existing retirement plan be updated to ensure its continued tax-qualified status.* The wrong choice can really hurt your future.

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BREAST CANCER

Urge Your Patients to Have Mammograms

AUDREY H. NORA, M.D., M.P.H.*

October is National Breast Cancer Month and thus an appropriate time to remind physicians that if the United States is to see a reduction in breast cancer mortality rates, their support is needed. Experts say that women have a 90% chance of surviving breast cancer if it is caught in its earliest, most treatable stage. An estimated 150,000 women will get breast cancer in 1990, and 44,000 women will die from it. One in ten American women will get breast cancer in her lifetime.

Mammography is the most effective method of detecting breast cancer in its earliest stage. The National Cancer Institute, the American College of Obstetricians and Gynecologists (ACOG) and 11 other medical organizations recommend that all women 40 and over have regular mammograms, according to these guidelines:

- Women age 40 and over should have mammograms every one to two years and yearly breast exams by their physicians.
- Women age 50 and over should have annual mammograms and breast exams.
- Adult women of *all* ages should perform monthly breast self-examinations.

In February 1990, a survey sponsored by the Jacobs Institute of Women's Health, a non-profit organization founded by ACOG, and with technical assistance from the National Cancer Institute, found that women are increasingly aware of the benefits of mammography and there has been a dramatic increase in mammography usage since the 1987 survey. However, the survey information collected once again states the important role that physicians have in referring a patient for a mammogram. Conclusions on the findings on the physician's role in mammography and breast cancer are as follows:

- Nearly three-quarters (74%) of women 40 and over who have had a mammogram did so because their physician said they should.
- Forty-five percent of women who have not

*Assistant Surgeon General, Acting Regional Health Administrator, USPHS, Kansas City, Missouri.

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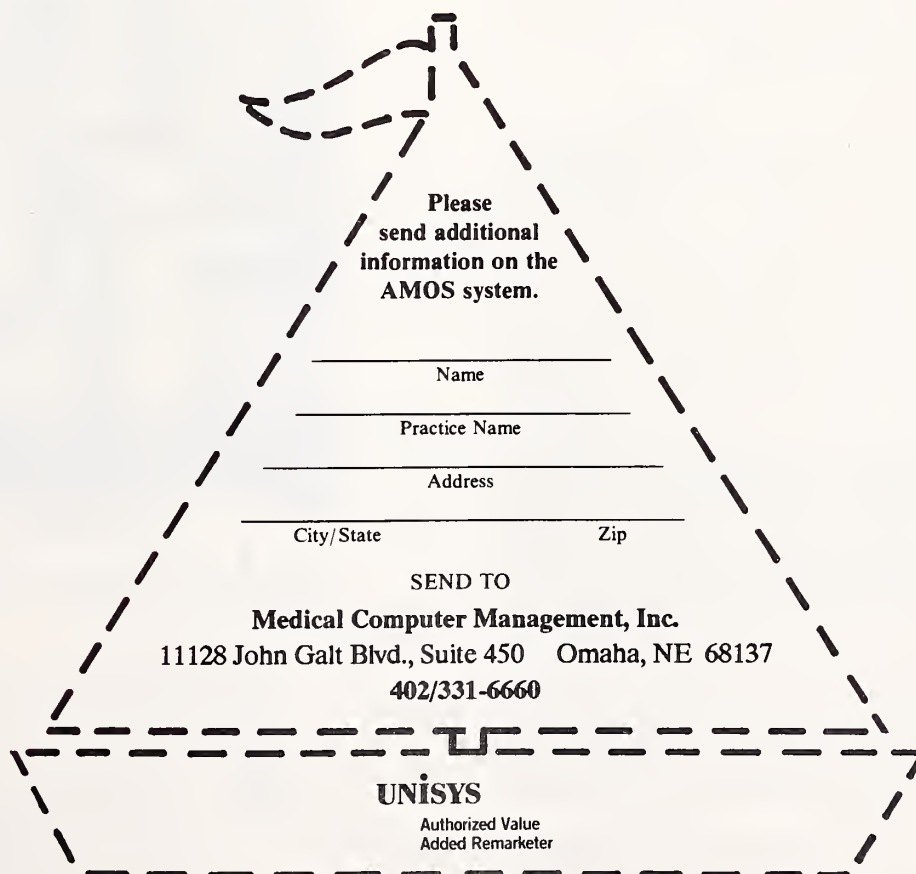
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had a mammogram say it is because their doctor has not recommended it.

Conclusions:

- Physicians are a key motivator in getting women to have mammograms regularly.

- If more physicians recommended regular mammograms, more women would get them.

Women who were surveyed indicated they had specific questions concerning the use of mammography:

- 1 Women did not understand that a mammogram is a test that should be used before symptoms appear.

- 2 Women did not understand that a mammogram is a test that should be repeated on a regular basis.

- 3 Women believe their chance of getting breast cancer is minimal if no family history exists.

- 4 Women have a fear of the amount of radiation they receive from mammograms.

- 5 Women are concerned about the cost.

If patients bring up these concerns, the following answers are helpful in informing them about mammograms:

- 1 Screening mammograms are for women with no symptoms. The best time to find breast cancer is before you can feel it.

- 2 Mammography can detect breast cancer in its earliest stages — up to two years before the patient or physician can feel a lump.

- 3 Eighty percent of women who get breast cancer have no family history of the disease.

- 4 Radiation exposure is minimal. Radiation is measured in units called rads. The usual mammographic examination consists of two films per breast and should not expose a person to more than one rad per breast.

- 5 The average cost of a screening mammogram is usually between \$100 and \$125 but can range from less than \$50 all the way to \$250. Currently, 26 states have passed laws requiring insurers to reimburse part or all of the cost of screening mammograms. Policymakers at the federal and state levels are working to provide expanded insurance coverage for mammography through Medicaid or Medicare programs. In the Kansas Medicaid program, mammograms are covered if medically necessary, ordered by a physician and performed by a radiologist. Medicare covers mammograms for personal history of breast cancer. There are certain other conditions that are reviewed on individual consideration.

Other questions that patients ask concern the quality of mammograms offered. Patients might

like to know the following:

If the facility is accredited by the American College of Radiology, it has already passed quality standards. If there are no accredited facilities near you, there are five simple questions you can ask a facility. A quality facility will answer "Yes" to all of these questions:

- 1 Does the facility use machines specifically designed for mammography? These are called "dedicated" mammography machines.

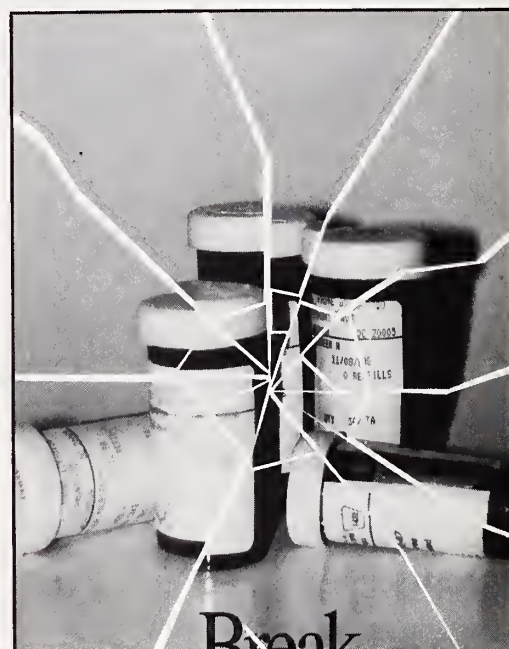
- 2 Are the mammograms provided by a registered technologist?

- 3 Is the radiologist who reads the mammograms specifically trained to do so?

- 4 Does the facility provide mammograms as part of its regular practice?

- 5 Is the mammography machine calibrated or checked at least once a year?

By encouraging women to seek clinical breast examinations in conjunction with screening mammography, physicians will aid their patients in fighting breast cancer through early detection.



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Interactions *A Medical Staff Leadership Program*

**November 29, 1990
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Medical staff leaders may find that their special clinical skills and extensive clinical experience do little to prepare them for the complexities of this demanding role. A role that requires the skills and sensitivity of an arbitrator, facilitator, manager, advisor, negotiator, communicator, problem solver, peacemaker and professional peer.

To help you refine your personal style of leadership, develop your professional decision-making and problem-solving abilities, and enhance your repertoire of management skills, the AMA is pleased to offer Interactions, the 1990 Medical Staff Leadership Program. It offers ample opportunity for leadership skill-building, self-assessment, frank conversation and feedback.

Program Participants

If you are a new chief-of-staff, department director, committee chairman or you serve in any other leadership capacity, the AMA's new Interactions can provide you with the self-assurance and skills you need to be successful in this challenging new role.

Leadership Objectives

- Improve emerging medical staff leaders' understanding of skills needed to perform formal duties.
- Enhance the understanding of medical staff leadership conflicts inherent in today's healthcare scene.
- Increase ability to interact effectively with medical staff peers and hospital/governing body leadership.

Location and Date

The AMA Medical Staff Leadership Program will be conducted on Thursday, November 29, 1990, at the Peabody Orlando Hotel, in Orlando, Florida. For ease of accommodations and travel, the AMA offers the program one day prior to the 1990 Hospital Medical Staff Section Interim Meeting, and three days prior to the 1990 AMA Interim Meeting.

Registration

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VACATION RENTALS: Snowmass, Colorado. House, 3 bedrooms, 3 baths, fully equipped, 5 min. from ski lifts. Rent direct from owner and save 35%. R. N. Barr, M.D., 7301 Mission Road, Prairie Village, KS 66208; or call evenings, 913-649-1277.

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Wide-QRS Tachycardia with LBBB Configuration

DONALD L. VINE, M.D.,* *Wichita*

One-third of the episodes of wide-QRS tachycardia reported by Wellens demonstrated a left bundle branch block (LBBB) configuration. The QRS morphology of lead V₁ was of no help in distinguishing between ventricular and supraventricular tachycardia, but qR and QS complexes in V₆ were only found in ventricular tachycardia.¹ Unfortunately, only four patients demonstrated the latter patterns, so these findings are not widely applicable.

Kindwall's Criteria

More recently the QRS morphology of wide-QRS tachycardia with a left bundle branch configuration was reevaluated by Kindwall and associates,² who proposed the criteria illustrated in Figure 1.

In addition to the presence of any Q-wave in V₆, V₁, and V₂ were examined for an r-wave wider than 0.03 msec, a slurred or notched downstroke of the S-wave and a delayed nadir of the S-wave of more than 60 msec.

When these criteria were applied to the tracings of 118 patients with wide-QRS tachycardia having predominantly negative deflections in V₁ (LBBB pattern), the specificity of individual observations for identifying ventricular tachycardia ranged from 96 to 100% and the sensitivity from 36 to 63%. When the presence of any criteria was considered to be a positive test, the sensitivity increased to 100%, but the specificity fell to 89%. This means that these criteria, applied clinically, would be expected to have a false positive rate of 11% for the identification of ventricular tachycardia.

Akhtar's Validation

When a new diagnostic index is suggested, it is important to look for independent verification.

Akhtar and associates studied a consecutive se-

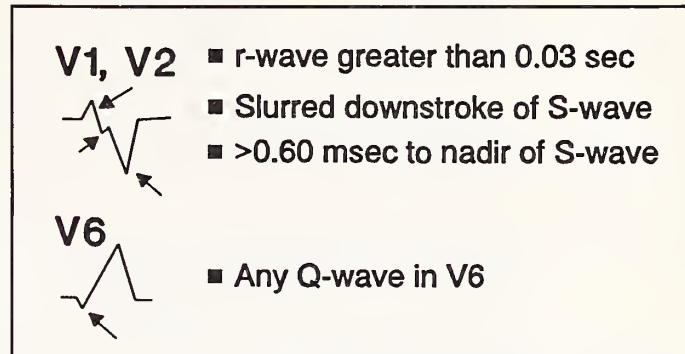


Figure 1. LBBB-configured tachycardia: criteria for ventricular origin.

ries of 150 patients with wide-QRS tachycardia in whom the diagnosis was made using electrophysiologic methods.³ Of these, 65 (43%) had a left bundle branch block configuration.

Using the presence of either a slurred downstroke of the S-wave in V₁ or V₂ or a delayed

TABLE 1
ACCURACY OF CRITERIA FOR VENTRICULAR
TACHYCARDIA WITH LBBB CONFIGURATION

Criteria/Author	Sens	Spec
V1/V2 R>30 Kindwall	36%	100%
V1/V2 Sn>60 Kindwall	63%	96%
V1/V2 SlurS Kindwall	36%	96%
V6 any Q-Wave Kindwall	55%	96%
Any criteria Kindwall	100%	89%
V1 Sn>=70 Akhtar	88%	90%

- Spec = specificity,
- Sens = sensitivity,
- R>30 = r-wave > 30 msec
- Sn>60 = Nadir of Q-wave later than 60 msec
- SlurS = Slurred or notched downstroke of S-wave

*Associate Professor, Department of Medicine, University of Kansas School of Medicine-Wichita

Address correspondence to Dr. Vine, Department of Medicine, UKSM-W, 1010 N. Kansas, Wichita, KS 67214.

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nadir of the S-wave of 70 msec or more, the sensitivity (88%) and specificity (90%) for the detection of ventricular tachycardia were comparable to the results obtained by Kindwall.

Comments

These criteria are worth remembering because they are reasonably accurate (see Table 1) and are applicable to 30 to 40% of patients with wide-QRS tachycardia. As with other morphologic criteria, they should not be applied without consideration of other findings because the false positive rate is probably 5 to 10%.

REFERENCES

1. Wellens HJJ, Bar FWH, Lie KI. The value of the electrocardiogram in the differential diagnosis of a tachycardia with a widened QRS complex. *Amer J Med* 1978;64:27-33.
2. Kindwall KE, Brown J, Josephson ME. Electrocardiographic criteria for ventricular tachycardia in wide complex left bundle branch block morphology tachycardias. *Am J Cardiol*, June 1, 1988;61:1279-83.
3. Akhtar M, et al. Wide-QRS complex tachycardia: Reappraisal of a common clinical problem. *Ann Intern Med* 1988;109:905-12.

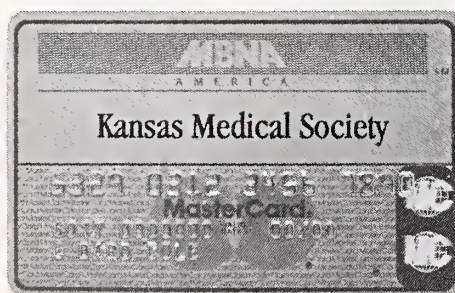
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Warnings: **Angioedema:** Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Patients with heart failure given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy. (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in patients with heart failure), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, Drug Interactions and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: **General:** **Impaired Renal Function:** As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (>5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See Drug Interactions.)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness, especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors. A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Pregnancy—Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters. There are no adequate and well-controlled studies of enalapril in pregnant women. However, data are available that show enalapril crosses the human placenta. Because the risk of fetal toxicity with the use of ACE inhibitors has not

been clearly defined, VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Postmarketing experience with all ACE inhibitors thus far suggests the following with regard to pregnancy outcome. Inadvertent exposure limited to the first trimester of pregnancy has not been reported to affect fetal outcome adversely. Fetal exposure during the second and third trimesters of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported, presumably representing decreased renal function in the fetus. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors, but it is not clear whether they are related to ACE inhibition, maternal hypertension, or the underlying prematurity.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of 14 C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

HYPERTENSION: The most frequent clinical adverse experiences in controlled trials were: headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

HEART FAILURE: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Cardiac arrest, myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, Hypotension); pulmonary embolism and infarction; pulmonary edema; rhythm disturbances; atrial fibrillation; palpitation.

Digestive: Ileus, pancreatitis, hepatitis (hepatocellular or cholestatic jaundice), melena, anorexia, dyspepsia, constipation, glossitis, stomatitis, dry mouth.

Musculoskeletal: Muscle cramps.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION).

Respiratory: Bronchospasm, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection.

Skin: Exfoliative dermatitis, toxic epidermal necrolysis, Stevens-Johnson syndrome, herpes zoster, erythema multiforme, urticaria, pruritus, alopecia, flushing, hyperhidrosis.

Special Senses: Blurred vision, taste alteration, anosmia, tinnitus, conjunctivitis, dry eyes, tearing.

A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgia/arthritis, myalgias, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitization, rash, and other dermatologic manifestations.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately (see WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings:

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g% and 1.0 vol%, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown): In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported. A few cases of hemolysis have been reported in patients with G6PD deficiency.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: **Hypertension:** In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed.

If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance >30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤ 30 mL/min (serum creatinine ≥ 3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated until blood pressure is controlled or to a maximum of 40 mg daily.


Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, Pharmacodynamics and Clinical Effects.) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Patients with Heart Failure and Renal Impairment or Hyponatremia: In patients with heart failure who have hyponatremia (serum sodium <130 mEq/L) or with serum creatinine >1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, Heart Failure, WARNINGS, and PRECAUTIONS, Drug Interactions.) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

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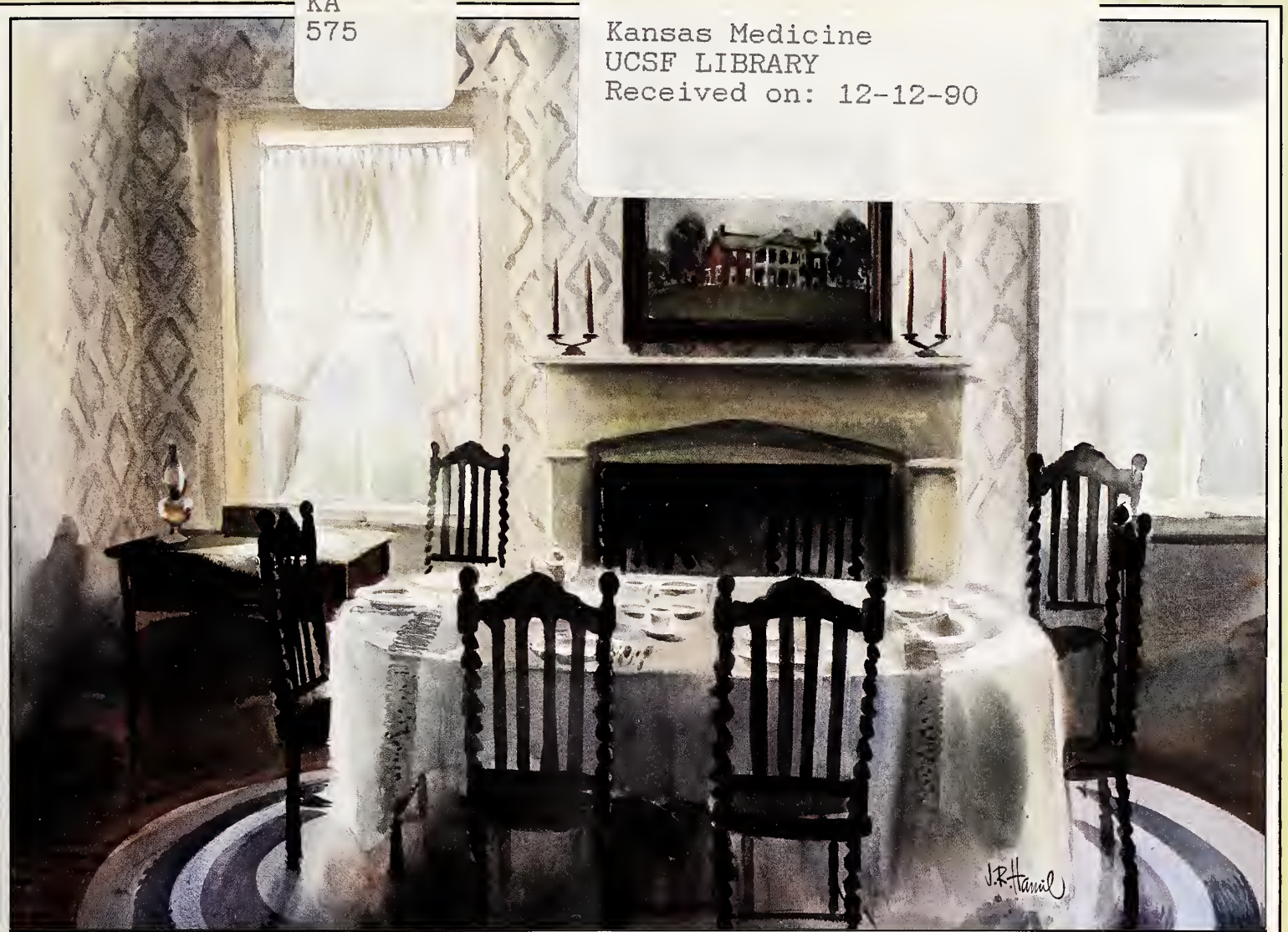
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1. Data on file, G.D. Searle & Co.
2. 1988 Joint National Committee: The 1988 report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. *Arch Intern Med* 1988;148:1023-1038.

BRIEF SUMMARY

Contraindications: Severe LV dysfunction (see *Warnings*), hypotension (systolic pressure < 90 mm Hg) or cardiogenic shock, sick sinus syndrome (if no pacemaker is present), 2nd- or 3rd-degree AV block (if no pacemaker is present), atrial flutter/fibrillation with an accessory bypass tract (eg, WPW or LGL syndromes), hypersensitivity to verapamil.

Warnings: Verapamil should be avoided in patients with severe LV dysfunction (eg, ejection fraction < 30%) or moderate to severe symptoms of cardiac failure and in patients with any degree of ventricular dysfunction if they are receiving a beta-blocker. Control milder heart failure with optimum digitalization and/or diuretics before Calan SR is used. Verapamil may occasionally produce hypotension. Elevations of liver enzymes have been reported. Several cases have been demonstrated to be produced by verapamil. Periodic monitoring of liver function in patients on verapamil is prudent. Some patients with paroxysmal and/or chronic atrial flutter/fibrillation and an accessory AV pathway (eg, WPW or LGL syndromes) have developed an increased antegrade conduction across the accessory pathway bypassing the AV node, producing a very rapid ventricular response or ventricular fibrillation after receiving I.V. verapamil (or digitalis). Because of this risk, oral verapamil is contraindicated in such patients. AV block may occur (2nd- and 3rd-degree, 0.8%). Development of marked 1st-degree block or progression to 2nd- or 3rd-degree block requires reduction in dosage or, rarely, discontinuation and institution of appropriate therapy. Sinus bradycardia, 2nd-degree AV block, sinus arrest, pulmonary edema and/or severe hypotension were seen in some critically ill patients with hypertrophic cardiomyopathy who were treated with verapamil.

Precautions: Verapamil should be given cautiously to patients with impaired hepatic function (in severe dysfunction use about 30% of the normal dose) or impaired renal function, and patients should be monitored for abnormal prolongation of the PR interval or other signs of overdosage. Verapamil may decrease neuromuscular transmission in patients with Duchenne's muscular dystrophy and may prolong recovery from the neuromuscular blocking agent vecuronium. It may be necessary to decrease verapamil dosage in patients with attenuated neuromuscular transmission. Combined therapy with beta-adrenergic blockers and verapamil may result in additive negative effects on heart rate, atrioventricular conduction and/or cardiac contractility; there have been reports of excessive bradycardia and AV block, including complete heart block. The risks of such combined therapy may outweigh the benefits. The combination should be used only with caution and close monitoring. Decreased metoprolol clearance may occur with combined use. Chronic verapamil treatment can increase serum digoxin levels by 50% to 75% during the first week of therapy, which can result in digitalis toxicity. In patients with hepatic cirrhosis, verapamil may reduce total body clearance and extrarenal clearance of digitoxin. The digoxin dose should be reduced when verapamil is given, and the patient carefully monitored. Verapamil will usually have an additive effect in patients receiving blood-pressure-lowering agents. Disopyramide should not be given within 48 hours before or 24 hours after verapamil administration.

Concomitant use of flecainide and verapamil may have additive effects on myocardial contractility, AV conduction, and repolarization. Combined verapamil and quinidine therapy in patients with hypertrophic cardiomyopathy should be avoided, since significant hypotension may result. Concomitant use of lithium and verapamil may result in a lowering of serum lithium levels or increased sensitivity to lithium. Patients receiving both drugs must be monitored carefully. Verapamil may increase carbamazepine concentrations during combined use. Rifampin may reduce verapamil bioavailability. Phenobarbital may increase verapamil clearance. Verapamil may increase serum levels of cyclosporin. Concomitant use of inhalation anesthetics and calcium antagonists needs careful titration to avoid excessive cardiovascular depression. Verapamil may potentiate the activity of neuromuscular blocking agents (curare-like and depolarizing); dosage reduction may be required. Adequate animal carcinogenicity studies have not been performed. One study in rats did not suggest a tumorigenic potential, and verapamil was not mutagenic in the Ames test. Pregnancy Category C. There are no adequate and well-controlled studies in pregnant women. This drug should be used during pregnancy, labor, and delivery only if clearly needed. Verapamil is excreted in breast milk; therefore, nursing should be discontinued during verapamil use.

Adverse Reactions: Constipation (7.3%), dizziness (3.3%), nausea (2.7%), hypotension (2.5%), headache (2.2%), edema (1.9%), CHF, pulmonary edema (1.8%), fatigue (1.7%), dyspnea (1.4%), bradycardia: HR < 50/min (1.4%), AV block: total 1°, 2°, 3° (1.2%), 2° and 3° (0.8%), rash (1.2%), flushing (0.6%), elevated liver enzymes. The following reactions, reported in 1.0% or less of patients, occurred under conditions where a causal relationship is uncertain: angina pectoris, atrioventricular dissociation, chest pain, claudication, myocardial infarction, palpitations, purpura (vasculitis), syncope, diarrhea, dry mouth, gastrointestinal distress, gingival hyperplasia, ecchymosis or bruising, cerebrovascular accident, confusion, equilibrium disorders, insomnia, muscle cramps, paresthesia, psychotic symptoms, shakiness, somnolence, arthralgia and rash, exanthema, hair loss, hyperkeratosis, macules, sweating, urticaria, Stevens-Johnson syndrome, erythema multiforme, blurred vision, gynecomastia, increased urination, spotty menstruation, impotence.

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**ABOUT OUR LOGO**

In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

Nature would have it that the cycle of its activities should begin in the spring, but mankind has generally resisted this, choosing instead the dark days of winter. Perhaps we find those gloomy days so disagreeable and the past months' experience so unsatisfying that we hope a new year will be some improvement (though in general that has never proved to be the case).

Still, the end of the harvest season, bountiful or spare, and the coincidence of various religious observances have been accepted as a turning point in the human year, a time for nostalgia, celebration, promises of a better future — and through it all, eating. (See page 297.) Thus, Jim Hamil's rendition of the dining room of the Grinter House, Kansas City, Kansas, is chosen as a fitting image for this month's cover.

On the festive days, the scene will be somewhat different. As is usually the case in holiday scenes, the table will be loaded with more food than anyone ought to eat — in fact, extra table leaves will probably be required to hold it all. The small fry will be relegated to another table, perhaps in the kitchen — or mounted on the Merriam-Webster dictionary or other tomes piled on the chairs. In any event, their places will later be identified by as much food around their areas and on their persons as in their stomachs.

But this scene recalls more than gluttonous holiday ceremonies, since it happens to be the dining room of the Grinter House. Moses Grinter came to Wyandotte County and, in 1830, established a ferry crossing on the Kansas River, to be followed in time by a post office, grist and saw mill — and a wife and 10 children. He built first a small cabin which was washed away in a flood, then a second dwelling that later burned, and finally the home now called the Grinter House, a state historical site administered by the Kansas State Historical Society. It is truly an indigenous house, as it was constructed from local woods and from bricks made of local clay fired on the site and held together by mortar made with lime from the area. The Junior League of Kansas City is credited with promoting the funding effort to obtain the property and donate it to the state.

Today the Grinter House dining room is quiet, as most museums are. But when the 12 Grinters gathered here for holiday meals, the scene must have been quite unlike the tranquil place on our cover.

The Twain Meet

At this writing, the two Germanys created by political surgery at the Yalta Clinic those many years ago have been reunited by a political anastomosis, anticipated but of startling speed in the event. The world (the "western" portion, at least) has been trying to absorb that phenomenon, the foundering of the totalitarian control over the "eastern" countries, and simultaneously cope with a new order which has moved in too fast and too far for orderly management. (And how disconcerting it must be for those order-loving Germans.) As the financial and industrial elements of those countries meet the baffling but welcome confrontation with the free-market system and receive daily attention and hasty news analyses, it is to be remembered that the medical systems of the two Germanys are experiencing a similar confrontation. For them, there is both hope and fear, as seen in a cartoon reprinted in the *World Press Review* from a West German paper, showing a pleased FRG standing on a prostrate GDR, saying, "I'll pick you up."



Though it has received little general attention (the more obvious industrial and commercial aspects understandably taking center stage), the joining of the two medical communities should provide a fascinating study for medical historians, economists and, certainly, practitioners.

A consideration of the extent of the problems might begin with the recollection that, while East Germany has been under the Soviet brand of totalitarianism for 45 years, it was under the Nazi version for at least 12 years before. Moreover, there has been more than a little socialism in German medicine for decades — at least as compared with the American style. The rigid governmental control of the East German state has extended to medicine by forcing physicians to practice a multispecialty clinic medicine to the exclusion of private, solo practice. Voluntary medical organizations were prohibited. Medical funds, their allocation and use were controlled by bureaucrats (whether physicians or not), and the revelation of the poverty of that area has shaken the West, even as it has proved the objections that have been leveled at the Communist regime were valid.

This is not to say that East German physicians have been functioning in a professional vacuum, not that its medical service has been impoverished. State dictation of method, equipment and services, however, have in the process determined its application and repressed the resourcefulness, effectiveness and, certainly, aspirations of the German physician. (It has been reported that there is only one magnetic resonance imager in the GDR and that new equipment, when acquired, has been 10 years behind the western standard.) The long and proud history of German medicine (excepting the Hitler years) has had to be maintained by the FRG, which now must infuse the eastern part with a spirit that has been absent for two medical generations.

But what of individual physicians and patients? They now face the characteristic problems of free choice in a market system which carries a concomitant responsibility to make decisions; that is, to use one's personal resources according to personal estimates of need and economy. The large clinics that have served the eastern political needs have, of necessity, established a mindset which is not likely to accept with universal pleasure the western system. This has not been overlooked by multispecialty groups in the west, which are hoping to persuade the already established eastern polyclinics to join the group. Meantime, organizations of private physicians and smaller groups are seeking new members among those eastern physicians disenchanted with the polyclinic life.

The pain on the eastern side will come from having to face free-market economic reality, which means that the built-in inefficiencies of the state system will have to be trimmed. The financial stringencies anticipated have brought pressures for government subsidies of the eastern groups and, in a prompt lesson in the free market reaction, this has not met with unqualified approval from the west.

But a significant problem, obscured by the more apparent economic factors, lies in the question of individual patient care. How will they take to the personal responsibilities necessary to receive appropriate care? Will they manage their own health care problems with foresight — and economy? We haven't answered that one ourselves yet. D.E.G.

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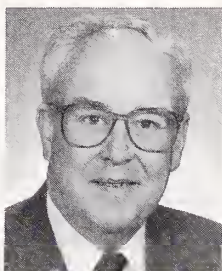
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Practice Guidelines: They Are Here

One of the most important developments in American medicine in the past few years has been the formulation of practice guidelines which specify for physicians the proper indications for performing medical procedures and treatments and the appropriate management of specific clinical problems. These guidelines, often referred to as practice parameters, are rapidly emerging from a variety of sources and are becoming prominent in national health policy issues. Of course, guidelines for the practice of medicine are not new; they reach back to the Hippocratic Oath and the origins of medicine itself. In 1938, the American Academy of Pediatrics began publishing its guidelines for the treatment of infectious diseases. For a number of years, other specialty societies, most notably the American College of Obstetricians and Gynecologists, the American College of Physicians and the American College of Cardiology, have all had in place formal procedures for developing practice guidelines. The recent interest in practice guidelines, however, has been sparked by the rapid emergence of medical technology and its impact on the rising cost of health care. The frequently cited 1987 report known as the Rand Health Services Utilization Study suggested that inappropriate use of coronary angiography, carotid endarterectomy and GI tract endoscopy ranged from 17 to 32%. A number of prominent health leaders have extrapolated from these studies that from one-quarter to one-third of all medical care may be unnecessary.



Recent developments at the national health policy level suggest that practice guidelines will play an increasingly prominent role in the practice of medicine. A series of articles now appearing in the *Archives of Internal Medicine* specifically addresses this issue.

One far-reaching program in research and development of practice guidelines has been established by a consortium working with the Rand Corporation, which includes a number of academic medical centers and the American Medical Association. Last June the AMA House of Delegates adopted a resolution urging specialty societies to share details of their practice parameter

development with the AMA, which will act as a clearinghouse for the information. Many other organizations, such as the Institute of Medicine, with funding from the John A. Hartford Foundation and the Public Health Service, are entering the field for the development, implementation and evaluation of practice guidelines. Within the last two months, the American College of Radiology has approved several sets of standards ranging from radiation oncology to mammography.

“Will these guidelines be primarily informative, or will they be punitive for clinicians?”

This rapid growth of practice parameters has led critics to question whether this is actually good news for physicians and patients. Unfortunately, in many instances practice guidelines are developed without direct involvement of the practicing physicians in the American community. This is largely because many rank-and-file physicians are unaware of the growing importance of practice guidelines at the national health policy level, and of the rapid establishment of these programs. In many instances, questions need to be asked concerning the validity of the guidelines themselves, the various methodologies by which they are developed and the appropriateness of implementing these guidelines in the day-to-day practice of medicine. Will these guidelines be primarily informative, or will they be punitive for clinicians? And will the effectiveness of such practice measures actually improve the practice of medicine? We must be ever vigilant to be certain that documents aimed at lowering health care expenditures and insurance premiums, thereby reducing the federal budget deficit, are agendas which at the same time improve the health care that we deliver to our patients.

An interesting and novel use of practice parameters has recently been developed by the state of Maine. The Maine Medical Association's medical liability legislation has recently been signed into public law. This project will establish practice parameters in the areas of emergency medicine, anesthesia and obstetrics and gynecology. Physicians electing to participate in this project will be able to assert compliance with established practice parameters and risk management protocols as an affirmative defense in any medical liability case brought against them as a result of alleged medical malpractice during this five-year project. The statute enacted by the state of Maine provides that for any claim of professional negligence against a physician participating in the project, that physician may introduce into evidence as an affirmative defense the existence of practice parameters. In essence, then, the physician will have the benefit of a known standard that cannot be challenged by experts within or outside of the state. Because the project was innovative and represented a positive approach aimed at reducing health care costs, the legislature, with opposition only from the trial lawyers, quite enthusiastically embraced this project, which will run through 1996.

My own personal concern in this emerging issue of practice parameters is that the physicians at whom these guidelines are aimed should become and remain intimately involved with their development and implementation. Certainly such interest and involvement is not foreign to the practicing physicians of Kansas. Shortly before the second world war and immediately thereafter, Kansas physicians urged the University of Kansas School of Medicine to develop an effective statewide program to update each physician on the proper management of specific clinical problems, including the proper indications for performing medical procedures, treatments and surgical interventions. Out of this request grew the circuit course for physicians, which was admired and emulated by other states and countries worldwide. Would it not be proper for a new Kansas circuit course to begin a dialogue among all of us as we consider the impact of these emerging practice parameters on our own individual medical practices?

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Determination of Death

WAYNE T. STRATTON, J.D.,* *Topeka*

The Kansas attorney general has recently issued an opinion directed to the Board of Nursing in which he concludes that the determination of human death is a medical diagnosis which must be made by a physician in accordance with accepted medical standards. All practicing physicians are aware of situations in which death of an elderly or terminal patient occurs, often in the early hours of the morning when a physician is not in attendance. The mortician desires quick possession of the remains, and the question arises as to whether a physician is obligated to go to the hospital to "pronounce" the patient dead.



As reiterated by the attorney general, there is no legal requirement that death be "pronounced." The determination of death is not only a medical diagnosis, but also has many legal implications, including estate distribution, medical malpractice claims, criminal liability, receipt of various third-party funding and other issues. A physician who has been caring for the patient does have an obligation to complete the death certificate. If the patient was not attended by a physician, the district coroner must be notified, and that official is obligated to complete the certificate.

Having stated that a determination of death is a medical diagnosis, the attorney general notes that it is not intended that such a duty impose an obligation upon a physician actually to examine the dead body in every instance prior to making the determination of death. In some instances, a medical diagnosis of death could be made based upon the statements of a nurse attending the patient. A nurse, however, is limited

Must a patient be
"pronounced" dead?
A recent opinion
explores this question.

to making nursing diagnoses, as distinguished from medical diagnoses. The attorney general concludes that "the degree to which the physician may rely on other than personally gained knowledge is to be determined by application of accepted medical standards, as well as the legal standard being applied. For example, if death is determined on the basis of irreversible cessation of entire brain function, more sophisticated knowledge may be required than when the determination is made based on obvious decapitation."

The attorney general's opinion appears to be well founded and reiterates thinking of other legal scholars in this area. His conclusion that the "degree to which a physician may rely on information not gained through personal observation when making the determination of death is governed by the applicable medical standard" properly places the issue upon the standards of the profession.

Occasionally, hospitals may adopt additional policies requiring a physician to view the body before discharge to the mortuary. This policy becomes an obligation imposed by the hospital in addition to that imposed by law, as a condition of hospital staff membership.

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.

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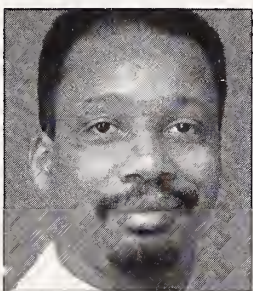
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THE WAY IT WAS

Coeducation was roundly condemned by President G. Stanley Hall, of Clark University, in his paper recently read before the American Academy of Medicine, in Boston. From his profound studies of adolescence, Dr. Hall is entitled to consideration and his opinions will have great weight in the present tendency to separate the sexes in the public schools after 12 years of age. It is quite likely that the vast majority of the medical profession already agree with Dr. Hall though from different motives. His opinion is based upon the fact that the life role of men requires a set of mental characteristics, the opposite of those of women, and that to modify either sex by training it in the atmosphere of the other, is to unfit it for its struggles for existence. A compromise of methods is unsuitable for either. Boys must be trained to greater manliness and girls to greater womanliness, so that each will be able to supplement the other. Coeducation may not produce long-haired men and short-haired women, but its tendency is in that direction. — Am. Med. (*The Journal of the Kansas Medical Society*, February 1, 1907, p. 629.)

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Who Should Deliver Anesthetics?

To the Editor:

We are counsel to the American Association of Nurse Anesthetists and have been asked to respond to an article you published in the October 1989 issue of *Kansas Medicine* ["Medicina et Lex" column, page 268]. The article, by Wayne T. Stratton, J.D., discussed *Leiker v. Gafford*, a case decided by the Supreme Court of Kansas in a decision filed August 4, 1989. Mr. Stratton's column concluded:

Physicians must beware [sic] that under the Court's interpretation of the circumstances of this case, they may be responsible for supervising the acts of the CRNAs who deliver the anesthesia for their surgical procedures. Unless the CRNA is supervised by another physician, surgeons may increase their liability by choosing a CRNA, instead of another physician, to deliver the anesthetic.

Mr. Stratton's conclusion overlooks the unique circumstances of the case and suggests an alternative that leaves physicians with the same liability. Moreover, Kansas law has been revised so that should the same case arise today, the result would be drastically different.

In determining whether a physician will be liable for the negligence of a nurse anesthetist being supervised, the courts do not look at the status of the anesthesia administrator, but at the degree of control the physician exercises over the anesthetist — whether the anesthetist is a CRNA or an anesthesiologist. Thus, courts have come to different conclusions in cases that involve a physician working with a CRNA — and, for that matter, in cases where a physician worked with an anesthesiologist — if the physician controlled the anesthetist in one case but not in another. A physician is not automatically liable when working with a CRNA, nor is the physician immune from liability when working with an anesthesiologist. There are cases where courts have found physicians liable for the negligence of an anesthesiologist because the physicians were in control of the anesthesiologist's actions.

In *Leiker v. Gafford*, the physician claimed that he merely had the duty to supervise and not to control the anesthetist. The problem was that the physician had already admitted that his professional corporation was vicariously liable for the nurse anesthetist's negligence. Thus, the physician's position was inconsistent. Second, in response to a specific question, the jury answered

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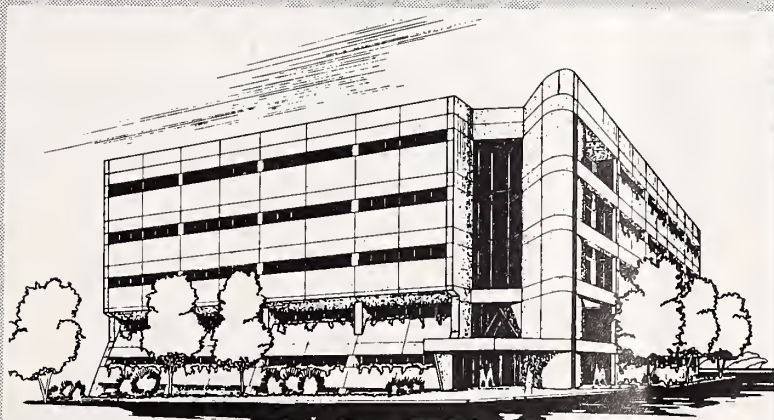
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that it found the surgeon responsible for the negligence of the nurse anesthetist as an agent, but it was not asked for which specific acts the surgeon was responsible. Moreover, the jury also found that the surgeon was negligent in the surgeon's own right for one or more acts of negligence attributed to him. Consequently, there was very little for the appeals court to consider on appeal.

There are numerous cases in which courts have held that surgeons were not in control of CRNAs. We will never know what would have happened in *Leiker v. Gafford* if the surgeon had not admitted that his professional corporation was vicariously liable. The law in Kansas is that mere supervision or direction is insufficient to hold a physician liable for a CRNA's negligence. *McCullough v. Bethany Medical Center* (235 Kan. 732, 1984). In *Baird v. Sickler* (Ohio Court of Appeals No. 6906, 1981), the Ohio Appellate Court, after research, found no case where a physician was held liable for the negligence of a CRNA, based solely on a physician's statutory obligation of supervision.

Second, KSA 40-3403(h), enacted July 1, 1986, provides that one health care provider qualified for coverage under the Health Care Stabilization Fund, does not have vicarious liability for injury or death caused by another health care provider

who is also qualified for coverage under the fund. The Kansas Supreme Court's opinion indicates that this statute would have disposed of *Leiker v. Gafford*, except that part of the damage in *Leiker v. Gafford* occurred prior to the enactment of the statute.

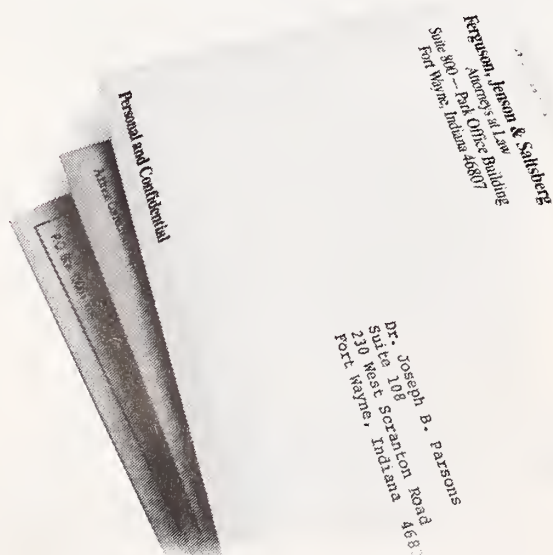
As precedent, *Leiker v. Gafford* recognizes liability only if physicians admit that they have vicarious liability, engage in acts of their own which are negligent and fail to request that the jury specify for what acts they are vicariously liable. Mr. Stratton's advice to select another physician to deliver anesthetics also overlooks the fact that in the absence of Kansas Statute 40-3403, surgeons could have been held liable for the negligence of anesthesiologists, just as for nurse anesthetists.

Anesthesia has become so safe today, and the likelihood of an anesthesia mishap so small, that surgeons should select an anesthesia provider in whom they have confidence; one who will do the best job for the patient. Liability considerations do not provide any basis on which to select an anesthesia provider based on the type of license.

Gene A. Blumenreich
Powers & Hall
Boston, Massachusetts

(Continued on page 288.)

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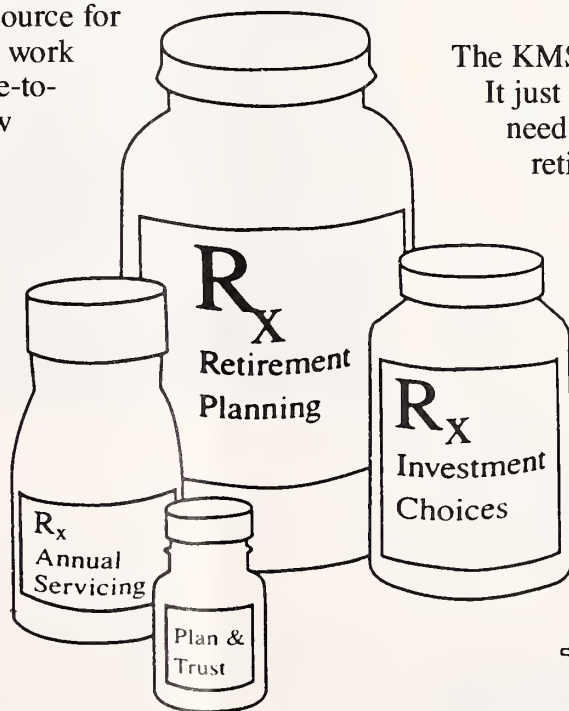
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Wayne Stratton Replies:

In Mr. Blumenreich's comments regarding the "Medicina et Lex" column concerning the case of Leiker v. Gafford, he makes the following points:

- 1 This case is unique and not likely to reoccur.*
- 2 The use of an anesthesiologist, instead of a CRNA, leaves physicians with the same liability.*
- 3 Kansas law has been revised so that, should the same case arise today, the result would be drastically different.*

I disagree with Mr. Blumenreich.

I did not tell physicians "to beware"; I said physicians should "be aware" that under the rationale of the Leiker v. Gafford decision, the courts are likely to find an operating surgeon responsible for the acts of the CRNA administering the anesthetic. This occurs because:

1 The Supreme Court stated that a surgeon usually is liable for the negligence of an anesthetist resident or a nurse anesthetist under the "captain of the ship" doctrine.

2 The Supreme Court apparently will apply Kansas Administrative Regulation 28-34-17(p), which requires that all anesthesia be under the supervision of a physician, to impose liability on the surgeon. While the surgeon would ordinarily not be liable if another physician is supervising the CRNA, in many instances the surgeon or the assistant at surgery will be the only physicians present.

If the anesthetic had been administered by a physician, or if the CRNA had been supervised by an anesthesiologist, then it appears likely that the court would not have interpreted Kansas law to impose supervisory liability upon the surgeon.

The only physician subject to supervising the CRNA was the surgeon. Given the court's interpretation of a regulation which had heretofore been considered to apply only to hospitals, the result was not surprising.

Mr. Blumenreich's statement, "The problem was that the physician had already admitted that his professional corporation was vicariously liable for the nurse anesthetist's negligence" appears to arise from a misreading of the court's opinion wherein the court stated, "Parties stipulated, and the jury was so instructed, that Gafford was the agent and employee of his professional corporation and that Marshall was the agent and employee of his professional corporation." There was no stipulation or agreement that the surgeon's corporation was responsible for the CRNA.

Mr. Blumenreich notes that K.S.A. 40-3403(h) provides that one health care provider does not have vicarious liability for injury or death caused by another health care provider. This statement is correct;

however, at this point physicians can take little comfort in this statute, as trial courts presented with the issue of the constitutionality of the same have split, and a Kansas appellate court has not yet resolved the issue. Until such a determination is made, health care providers must cautiously approach this issue.

Anesthesia is safe, and certified registered nurse anesthetists provide a valuable service throughout the state of Kansas. It is regrettable that the Kansas Supreme Court utilized a somewhat outdated concept and a regulation which pertained to hospitals to impose liability upon a physician.

While Mr. Blumenreich is correct in that there are numerous states in which courts have held that surgeons were not liable for the acts of CRNAs, unfortunately at this stage, Kansas is not one of them. The court's syllabus says: "A surgeon usually is liable for the negligence of an anesthetist-resident or a nurse-anesthetist under the 'captain of the ship' doctrine. In an appropriate case the surgeon may also be liable based upon K.A.R. 28-34-17(p)."

Theophylline Toxicity

To the Editor:

I have recently become aware of a significant problem with theophylline about which physicians may not be informed: the alteration of theophylline clearance during viral illness or fever. Serum levels can be increased from the therapeutic range into the toxic range by either viral illness or fever. The majority of physicians in my community were not aware of the seriousness of this problem. I hope to share this information as well as the current philosophy regarding theophylline.

Theophylline toxicity resulting from overdose has been recognized for a long time as a potential problem when using this drug in the management of reactive airways disease. It is now recognized that elevated temperature lasting 24 hours or longer, and probably many viral infections, can significantly alter the clearance of theophylline, resulting in elevation of serum theophylline levels into the toxic range. Seizures with permanent severe brain damage may occur as a result of these high levels. Please have your members who use this drug review the medical literature regarding the safe use of theophylline. Consider using other medications first before using theophylline. If theophylline is used, keep serum levels between 5 and 15 µg/ml instead of the 10–20 µg/ml range. Should fever or viral infections of 24 hours' duration or longer occur, reduce the dose of theo-



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Brief, concise **articles** are preferred; an ideal manuscript will not exceed five double-spaced pages. All material will be edited by the editorial staff to assure clarity, good grammar and appropriate language, and to conform to KANSAS MEDICINE style and format. When feasible, material may be condensed.

The author will be asked to review the **galley proof** prior to publication. Although editing and proofreading will be done with care, the author is responsible for accuracy of material published. The galley proof is for correction of **ERRORS**; rewriting of material *must* be done prior to submission. Authors are urged to check manuscripts and galley proof carefully for errors that could result in inaccurate information.

Drugs should be referred to by generic names; trade names may follow in parentheses if useful. All **units of measure** must be given in the metric system.

KANSAS MEDICINE will print a maximum of **ten references**. All references should be keyed with superscripts in the text in the order cited. If more than ten sources are cited, readers will be referred to the author for the complete list.

Illustrative material must be identified by its referral number in the text and be accompanied by a short legend. **Photos** should be black-and-white glossy prints. **Tables** should be self-explanatory and should supplement, not duplicate, the text.

KANSAS MEDICINE will assume the cost of black-and-white figures and tables for two units. A unit is defined as ¼ page. The author(s) will be billed for additional units at cost.

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phylline by half during that illness, or if that is not safe, then monitor theophylline levels more carefully.

James A. Klicpera, M.D.
The Everett Clinic
3901 Hoyt Ave.
Everett, Washington 98201

REFERENCES

Koren G, Greenwald M. Decreased Theophylline Clearance Causing Toxicity in Children during Viral Epidemics. *J Asthma* 22(2):75;1985.

Kraemer MJ, et al. Altered Theophylline Clearance during an Influenza B Outbreak. *Pediatrics* 69:476;1982.

Weinberger M. Theophylline Toxicity and Viral Infections. *Pediatrics* 70:508;1982.

Weinberger M. *Managing Asthma* (Baltimore: Williams & Wilkins, 1990).

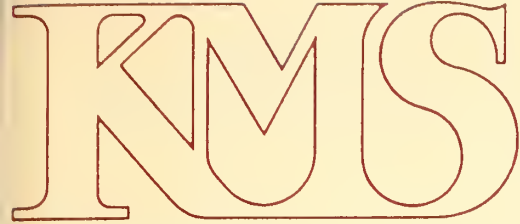
MATERNAL HEALTH COMMITTEE

Recommendations on VBACS

Resolution 90-14, adopted at the KMS Annual Meeting last May, charges the KMS Maternal Health Committee with contacting "each Kansas hospital where babies are delivered to determine the acceptance of the recommendations outlined in this resolution and the impact from these recommendations on the overall Kansas Cesarean section rate." The recommendations contained in Resolution 90-14 are:

[That] the Kansas Medical Society, the Kansas Section of the American College of Obstetricians and Gynecologists and the Kansas Chapter of the American Academy of Family Physicians support the concept of allowing a woman with a previous Cesarean section to have the opportunity to have a trial of labor to deliver vaginally in a subsequent pregnancy. [And that] they recommend that each hospital and its medical staff develop protocols and guidelines to manage patients undergoing vaginal birth after a previous Cesarean section. It is further recommended that the ACOG committee opinion number 64, October 1988, "Guidelines for Vaginal Delivery After a Previous Cesarean Birth" be utilized in developing these guidelines and protocols. The hospitals and staff are also encouraged to be guided by the statements contained in the article, "Vaginal Birth After Cesarean Delivery," from *American Family Physician* 1988;37:167-171.

The committee is to report the results of this inquiry, when available, to the KMS Council and to the KMS House of Delegates at the 1991 Annual Meeting.



KANSAS MEDICAL SOCIETY

Newsletter

NOVEMBER 1990

1300 Topeka Ave. • Topeka, Kansas 66612 • (913) 235-2383

INTERIM COMMITTEES CONCLUDE STUDIES

Traditionally, November is the month when interim legislative committees conclude their special studies and instruct the staff on how to write reports to the Legislative Coordinating Council. The Public Health and Welfare Committee has decided not to recommend legislation that would regulate private-sector utilization review of health care. Because of its efforts currently underway to develop voluntary performance standards for nationwide application, the committee recommended that the Legislature monitor development and implementation of standards and accreditation of UR organizations. In other words, this issue could be reconsidered if the voluntary program is unsuccessful.

The Insurance Committee has decided not to recommend repeal of mandated health insurance coverages. The committee has decided tentatively that reimbursement for mammography services should be conditioned upon quality assurance. That is, the clinic would have to be approved by the state; otherwise the insurer would not be bound to pay for the mammography. The committee also decided to make coverage for mental illness or addiction disorders conditional, but in a manner that imposes on insurers a new mandate that would be required to establish "managed care" systems for reviewing claims.

CONSENSUS DEVELOPMENT REPORTS ARE AVAILABLE FROM KMS

The National Institutes of Health regularly holds consensus development conferences, at which a consensus panel hears presentations, reaches conclusions and makes recommendations on the subject under consideration. A report is then issued. KMS has received the following two-page reports:

- * The Treatment of Sleep Disorders of Older People
- * Adjuvant Therapy for Patients with Colon and Rectal Cancer
- * Noise and Hearing Loss
- * Intravenous Immunoglobulin: Prevention & Treatment of Disease

If you would like a copy of any of these reports, call KMS at 913-235-2383 or 800-332-0156.

HEALTHY HOLIDAY EATING IS FEATURED IN KANSAS MEDICINE

A special feature in the November issue of KANSAS MEDICINE offers an opportunity for you and your family, as well as your patients, to learn ways of enjoying this holiday season while still maintaining a healthy diet. KMS Auxilian Barbara S. Beahm, of Great Bend, shares valuable information on adapting family traditions and incorporating some new ones as well. A selection of seasonal recipes will make it easier to introduce her suggestions into the family's holiday plans.

You are encouraged to photocopy the four-page article and

make it available to your patients during the month of December. And don't forget to take a copy home for your own use. Bon appetit--and here's to your health!

NATIONAL PRACTITIONER
DATA BANK BOOKLET
IS AVAILABLE AGAIN

Reprints of the AMA's informational booklet National Practitioner Data Bank are available from KMS. The booklet describes the data bank and how it affects physicians, explains how to dispute data bank information and answers frequently asked questions. To obtain a copy of this booklet, call KMS at 800-332-0156 or 913-235-2383.

SILVER-HAIRED
LEGISLATURE CONVENES
IN TOPEKA

The Silver-Haired Legislature (SHL), a 125-member group of older Kansans representing 105 counties, meets annually to debate a variety of issues. Bills passed by the body are submitted to the Governor and the Legislature as recommendations for state policy. Kansas is one of about 30 states having a Silver-Haired Legislature or its equivalent. The purpose of these senior adult legislatures is to provide true-to-life experience in the intricacies of the legislative process. They also serve as a way for Kansas senators and representatives to get a feel for the issues of most concern to older people. Senior citizens represent 18% of the population of Kansas.

The Silver-Haired Legislature met recently in Topeka. Among the legislation considered and recommended for the Kansas Legislature this year are bills dealing with tax credits for providers in rural areas; increased Medicaid reimbursement for rural hospitals; in-home care; solid waste management; and nutrition.

The Kansas Medical Society provides the Doctor-for-the-Day during the SHL sessions. Douglas L. Young, M.D., Wichita, Chairman of the KMS Committee on Geriatric Medicine, became the Doctor-for-the-Session when he volunteered and served for the entire three-day plenum. On behalf of KMS and SHL, Dr. Young, thank you very much!

KMS/KaMMCO
HOLIDAY SCHEDULE

The Kansas Medical Society and KaMMCO offices will be closed on Monday, December 24 and Tuesday, December 25. They will reopen at 8:00 a.m. on Wednesday, December 26. The offices will be open on Monday, December 31 and closed on January 1, 1991, reopening on Wednesday, January 2, 1991. Please mark your calendar.

COUNSEL YOUR PATIENTS
WHEN PRESCRIBING

When prescribing medications for patients, using the following counseling tips will increase the likelihood of compliance:

- * Express concern for and/or interest in the patient.
- * Assess the patient's prior knowledge of the disease and/or treatment, and any real or anticipated concerns or problems which the patient has.
- * Display appropriate non-verbal behavior in voice, eye contact and body language.
- * Use a vocabulary the patient can understand.

- * Present facts and concepts in a logical, sequential order.
- * Convey complete and accurate information about the medication and its use.
- * Summarize the information presented.
- * Check to determine the patient's understanding.

Remember to speak slowly and distinctly when communicating with non-native speakers of English, and to give complete verbal instructions if you suspect your patient may not be able to read. Because of the amount of time children spend away from their parents, it is a good idea to instruct the child, as well as the parent, when prescribing medications for your young patients.

DIDANOSINE TRIALS AND EXPANDED ACCESS FOR AIDS AND ARC PATIENTS

By mid-July 1990, more than 10,000 patients with AIDS or ARC had received didanosine (ddI), an experimental anti-HIV drug, through either Phase II clinical trials supported by the National Institute of Allergy and Infectious Diseases (NIAID) or through an expanded access program initiated by Bristol-Myers Squibb Co. Although well tolerated overall, ddI produces some toxicities: pancreatitis has been reported in 1.5% of patients enrolled in the Phase II trials and in 2% of patients enrolled in the expanded access program. The risk of pancreatitis appears to be strongly correlated with prior history of pancreatitis and with advanced HIV disease and poor clinical status.

NIAID has prepared a "Note to Physicians," detailing specific precautions for doctors to consider to decrease the risks of pancreatitis, along with a description of other side effects. The ddI "Note to Physicians" and information on the ddI and other AIDS studies may be obtained by contacting the AIDS Clinical Trials Information Service at 800-TRIALS-A.

Physicians are strongly encouraged to consider referral of eligible patients to the ddI controlled clinical trials, whose completion is essential for a full understanding of ddI's long-term safety and efficacy in treatment of HIV-infected patients.

Bristol-Myers Squibb Co. is offering an expanded access program to provide ddI to patients with HIV who are ineligible for the Phase II trials. More information on this program is available through the company's VIDEX Information Center at 800-662-7999.

DIDEOXYCYTIDINE TRIALS AND EXPANDED ACCESS

Similar programs have recently begun under the sponsorship of Hoffmann-La Roche, manufacturers of dideoxycytidine (ddC), for patients who have developed an intolerance to AZT. To enter a patient into the ddC expanded access program, call 800-ddC-21-HIV. For information about clinical trials involving ddC, call the AIDS Clinical Trials Information Service at 800-TRIALS-A, or Roche at 800-526-6367.

AMA CONFERENCES: GOOD MEDICINE

Knowledge, standards, autonomy, responsibility: it's a complex and critical balance. But the many-sided social contact between physicians and the public is what distinguishes

medicine as a true profession. Explore the perspectives on a profession for the 21st century! Attend the 1991 National Leadership Conference, February 15-17, at the Fontainebleau Hilton Hotel in Miami. To register, call 800-621-8335. Or, for more information, call KMS at 800-332-0156.

The National Communications Conference, designed for those who wish to hone their public speaking skills, precedes the Leadership Conference at the Fontainebleau Hilton. The dates are February 13-15.

CONGRATULATIONS

...To Joseph C. Meek, Jr., M.D., KMS President and professor and chairman, Internal Medicine, UKSM-Wichita. Dr. Meek has been selected as the fourth Dean of UKSM-W, as of January 1, 1991. Dr. Meek succeeds William J. Reals, M.D. (KMS President, 1971-72), who has served as Dean for the past 10 years. Dr. Reals will remain on a part-time appointment as vice chancellor.

GRANTS AND STIPENDS FOR PHYSICIANS

The Occupational Physicians Scholarship Fund is offering stipends to physicians who plan to enter the field of occupational medicine. The deadline for completed applications is January 1, 1991. For information, write the American College of Occupational Medicine, 55 West Seegers Road, Arlington Heights, Illinois 60005.

The Juvenile Diabetes Foundation International is offering grants in diabetes research for the 1991-92 year. Applications are due by February 15, 1991. Write to Grant Administrator, Juvenile Diabetes Foundation International, 432 Park Avenue South, New York, NY 10016.

CALL FOR PAPERS

The National Commission on Correctional Health Care (NCCHC) announces a call for papers to be presented at its 15th National Conference, which will be held September 23-25, 1991, in San Antonio. The deadline for abstracts is April 1, 1991. Information may be obtained by writing Abstracts, National Commission on Correctional Health Care, 2105 N. Southport, Suite 200, Chicago, Illinois 60614.

LITTLE RED RIDING HOOD

Who has big eyes, big teeth and a big alcohol problem? Little Red Riding Hood's grandmother! In an edition of the classic tale that was recently banned in Culver City, California, the well-meaning but misguided tot carries in her basket of goodies for granny a bottle of wine, which would "do her a world of good." The red-nosed grandmother was said to feel "strong and healthy" after sampling the wine, but the Culver City school district officials who read the book were not convinced. They removed this edition from a recommended reading list for the city's five- and six-year-olds.

Of course, with today's shortage of woodsmen, this version of the story might offer a more practical means of subduing the wolf!

Where there's smoke...there may be bronchitis



"Recent research has delineated early, more subtle changes in lung and immune functions. These alterations directly predispose smokers to respiratory tract infection."

Am Fam Phys 1987;36:133-140

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Contraindication: Known allergy to cephalosporins.

Warnings: CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Cecclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of non-susceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Cecclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Cecclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Hypersensitivity reactions have been reported in about 1.5% of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions have been reported with the use of Cecclor. These are characterized by findings of erythema multiforme, rashes, and other skin manifestations accompanied by arthritis/arthralgia, with or without fever, and differ from classic serum sickness in that there is infrequently associated lymphadenopathy and proteinuria, no circulating immune complexes, and no evidence to date of sequelae of the reaction. While further investigation is ongoing, serum-sickness-like reactions appear to be due to hypersensitivity and more often occur during or following a second (or subsequent) course of therapy with Cecclor. Such reactions have been reported more frequently in children than in adults with an overall occurrence ranging from 1 in 200 (0.5%) in one focused trial to 2 in 8,346 (0.024%) in overall clinical trials (with an incidence in children in clinical trials of 0.055%) to 1 in 38,000 (0.003%) in spontaneous event reports. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy; occasionally these reactions have resulted in hospitalization, usually of short duration (median hospitalization = two to three days, based on postmarketing surveillance studies). In those requiring hospitalization, the symptoms have ranged from mild to severe at the time of admission with more of the severe reactions occurring in children. Antihistamines and glucocorticoids appear to enhance resolution of the signs and symptoms. No serious sequelae have been reported.
- Stevens-Johnson syndrome, toxic epidermal necrolysis,

and anaphylaxis have been reported rarely. Anaphylaxis may be more common in patients with a history of penicillin allergy.

- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1% and, rarely, thrombocytopenia and reversible interstitial nephritis.
- Abnormalities in laboratory results of uncertain etiology.**
- Slight elevations in hepatic enzymes.
- Transient lymphocytosis, leukopenia, and, rarely, hemolytic anemia and reversible neutropenia.
- Rare reports of increased prothrombin time with or without clinical bleeding in patients receiving Cecclor and Coumadin concomitantly.
- Abnormal urinalysis; elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistest[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

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MRI of Brain Abnormalities in Cockayne Syndrome

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Cockayne syndrome (CS) is a rare disorder characterized by dwarfism, microcephaly, retinal pigmentation, deafness, ataxia, mental retardation and progeroid facies.¹ Less-common features include photosensitivity; kyphosis; optic atrophy; carious teeth; large, distal extremities; and hypogonadism. The pathogenesis is unknown, but inheritance via an autosomal recessive genetic defect involving several germ layers is postulated.² The prenatal, congenital form is designated as CS type II, while cases with later onset are designated CS type I.³ Two reports discuss central nervous system (CNS) magnetic resonance imaging (MRI) findings in patients classified as CS type II.^{4,5} One previous report of central nervous system MRI findings in CS type I exists in the literature.⁶ This report presents the MRI-detected brain abnormalities of a patient with CS type I in greater detail than the previous report.

Case Report

This 13-year-old white female had been evaluated for short stature at 10 months of age. At 18 months, she demonstrated significant motor and language developmental delays. Tremors of the extremities were noted at 3 years of age. Ongoing intellectual and growth defects were evident, and she was diagnosed with Cockayne syndrome at age 10, due to the onset of progressive neurologic symptoms. When seen at age 13, she was noted to have growth retardation, sunken eyes, a loss of subcutaneous fat and a beak-like nose. Her neurological exam demonstrated bilateral fine tremors (intention and static) and dysdiadochokinesis with brisk deep-tendon reflexes in all extremities. Cogwheeling was noted solely in the lower extremities. Her gait was ataxic and wide-

based. She exhibited abnormal brainstem auditory-evoked responses with significant high-frequency hearing loss bilaterally.

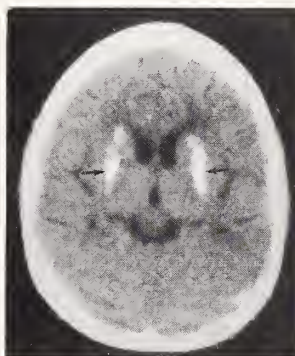


Figure 1. Bilateral calcification of the basal ganglia on CT.

Initial brain imaging with CT demonstrated bilateral calcification of the basal ganglia (Figure 1) and cerebellar dentate nuclei. Magnetic resonance imaging of the head was subsequently performed. Multiple axial, sagittal and coronal T1-(500/17) and T2-weighted (2500/120) images were obtained using spin echo technique. The T1-weighted images demonstrated a mixed signal intensity within the basal ganglia with the lower signal intensity possibly corresponding to calcium deposition (Figure 2). Additionally, decreased signal intensity anterior and lateral to the frontal horns was present, consistent with leukoencephalopathy (Figure 3).

T2-weighted images demonstrated decreased signal intensity within the putamen and globus pallidus, consistent with iron and calcium deposition (Figure 4). The T2-weighted images also demonstrated an abnormal low intensity within

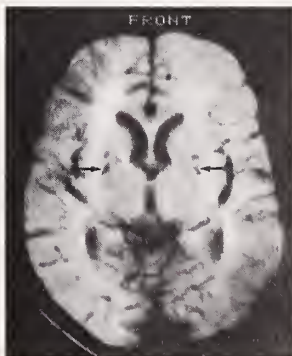


Figure 2. T1-weighted image demonstrating basal ganglia hypointensities.

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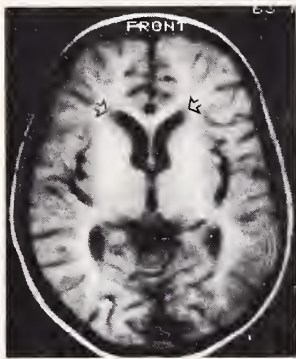


Figure 3. T1-weighted image revealing decreased signal intensity anterior and lateral to the frontal horns bilaterally.

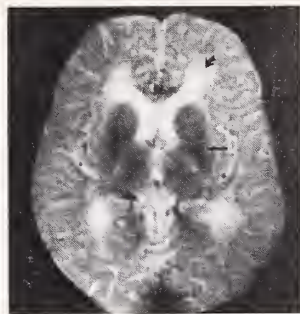


Figure 4. T2-weighted image showing decreased signal intensity regions in the basal ganglia (straight arrow) and increased signal intensity anterolateral to the frontal horns (curved arrow).

the cortical gray matter of both hemispheres, consistent with iron deposition (Figure 5). The corpus callosum was small, and the prominence of the sulci and ventricles was consistent with generalized cortical atrophy (Figure 6). There was no evidence of normal pressure hydrocephalus, infarction or masses.

Discussion

Progressive neurologic deterioration is usually evident in the second decade in Cockayne syndrome. These patients are typically unable to care for themselves, and death commonly occurs by late childhood or early adulthood. A variety of neuropathologic features are described in this syndrome, some of which are evident in the central nervous system MRI of this case. Previously described pathologic findings include the symmetrical distribution of calcium in the basal ganglia.⁷ Other findings include fine depositions of calcium in the cerebral and cerebellar cortical ribbon.² Histologically, the basal ganglia can present with brownish discoloration, particularly in the globus pallidus.⁷ Many CNS disorders are associated with excessive iron deposition, as seen in this case. There is no iron in the brain at birth, but it progressively increases in content with age. Decreased signal intensity on T2-weighted images provides an accurate representation of brain iron distribution.⁸

The cerebral cortex is commonly atrophic, and the corpus callosum is thin. Myelin stains frequently show diffuse demyelination. Occasionally, the ventricular system is enlarged, with associated normal pressure hydrocephalus.⁹

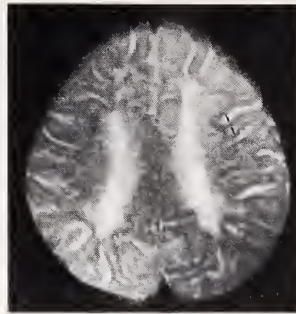


Figure 5. T2-weighted image revealing low signal intensity in cerebral cortex.

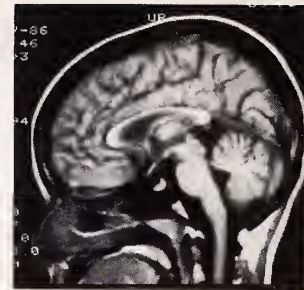


Figure 6. T1-weighted image demonstrating thinning of the corpus callosum.

Commonly encountered symptoms consistent with the characteristic triad of normal pressure hydrocephalus include progressive dementia with a reduced state of consciousness, apraxic gait disturbance with spastic paraparesis and urinary incontinence. Rare tissue findings include bizarre astrocytes and neurofibrillary tangles.¹⁰

Conditions that present in the differential diagnosis of CS include Weiner's syndrome, François' syndrome, Rothmund-Thomson syndrome, Bloom syndrome, Pelizaeus-Merzbacher syndrome and progeria.^{7,10} MRI is thus a useful aid to the clinical diagnosis of CS, by virtue of its ability to identify brain abnormalities specific to this disorder.

REFERENCES

1. Sugarman GI, Landing BH, Reed WB. Cockayne syndrome: Clinical study of two patients and neuropathologic findings in one. *Clin Pediatr* 1977;16:225-31.
2. Rowlett U. Cockayne's syndrome: Report of case with necropsy findings. *Acta Neuropath* 1969;14:52-61.
3. Lowry RB. Early onset of Cockayne syndrome. *Am J Med Genet* 1982;13:209-10.
4. Nishio H, Kodama T, Matsuo M, Ichihashi M, Iro H, Fujiwara Y. Cockayne's syndrome: Magnetic resonance images of the brain in a severe form with early onset. *J Inherited Metab Dis* 1988;11:88-102.
5. Dabbagh O, Swaiman KF. Cockayne syndrome: MRI correlates of hypomyelination. *Pediatr Neurol* 1988;4:113-16.
6. Boltshauser E, Yalcinkaya C, Wichmann W, Reutter F, Prader A, Valavanis A. MRI in Cockayne syndrome type I. *Neuroradiology* 1989;31:276-77.
7. Guzzetta F. Cockayne-Neill-Dingwall syndrome. In: Vinken PJ, Bruyn GW, eds. *Handbook of Clinical Neurology* (Amsterdam/New York: Elsevier North Holland, 1972).
8. Drayer B, Burger P, Darwin R, Riederer S, Herfkens R, Johnson GA. MRI of brain iron. *AJR* 1986;147:103-10.
9. Brumback RA, Yoder FW, Andrews AD, Peck GL, Robbins JH. Normal pressure hydrocephalus. Recognition and relationship to neurological abnormalities in Cockayne's syndrome. *Arch Neurol* 1978;35:337-45.
10. Soffer D, Grotsky HW, Rapin I, Suzuki K. Cockayne syndrome: Unusual neuropathological findings and review of the literature. *Ann Neurol* 1979;6:340-48.

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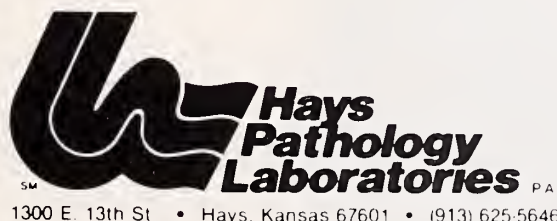
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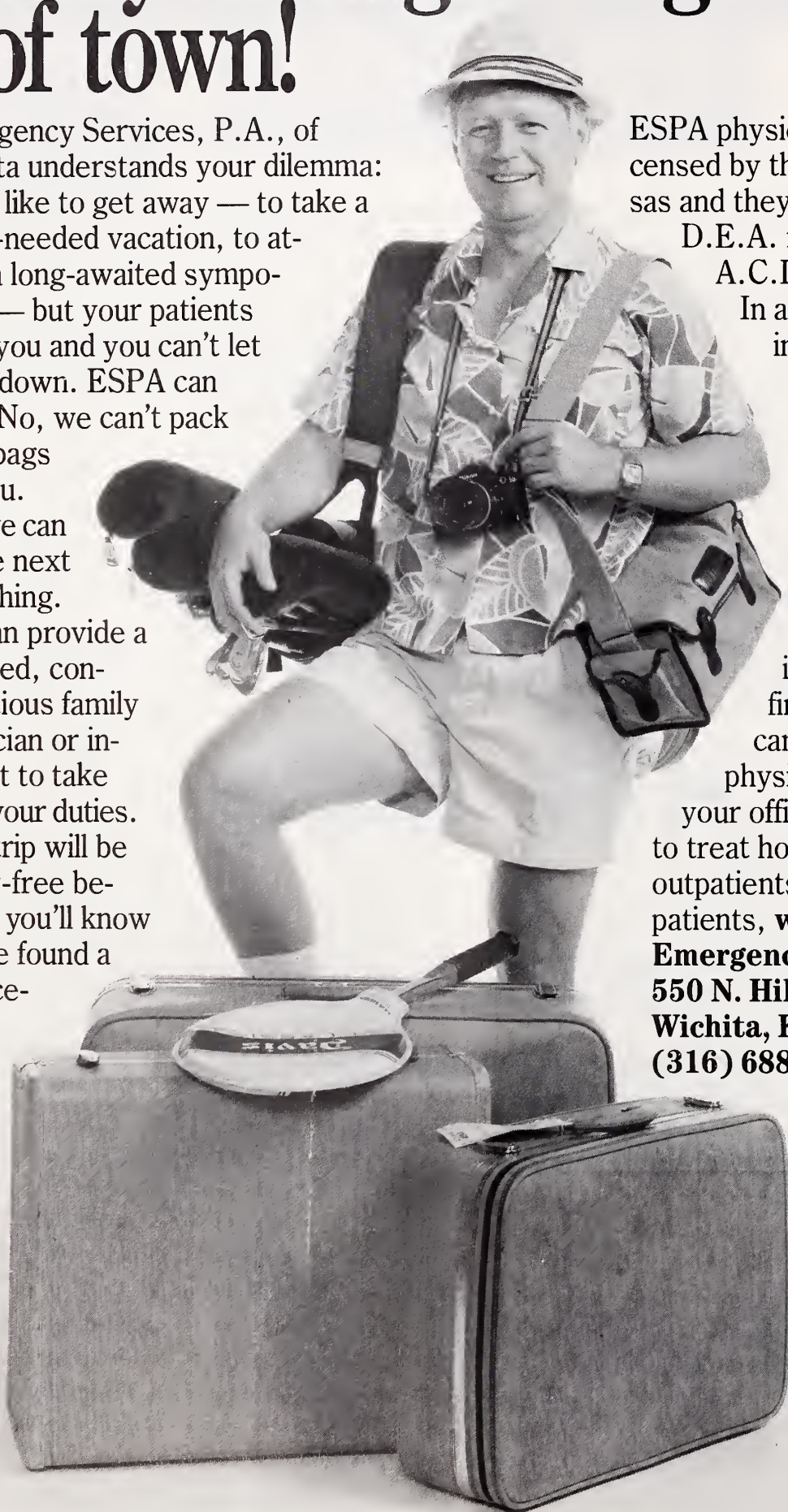
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Healthy Holidays

Editor's Note: The Kansas Medical Society wishes you a happy and healthy holiday season. We've collected some recipes to help you plan your festive occasions and asked a member of the KMS Auxiliary, Barbara S. Beahm, a registered dietitian from Great Bend, for advice on how to adapt your favorite holiday dishes to fit into a sensible menu plan that is lower in fats, sugar and calories. We encourage you to incorporate these tips and recipes into your family's special celebrations. When the new year comes, you'll be glad you did!

The Tradition You'll Enjoy Breaking

BARBARA S. BEAHM, R.D., M.S.

Traditions give us great joy during the holiday season, but there is one tradition you can enjoy *breaking*. It's the one in which you pop any and all available goodies into your mouth, feel stuffed and experience the sensation of your clothes shrinking on your body. Controlling your weight during the holiday season is difficult. External cues such as office parties, advertisements and commercials, and friends and relatives urging you to "live a little, it's Christmas" all encourage overeating. Tension, depression and loneliness — even happiness — are all internal cues that may make you want to gorge. To avoid gaining weight during this holiday season, try the following tips:

Plan in advance what you will eat during the day. Practice the self-statement "I choose to control my eating during this party [or meal, day, etc.]." This makes you responsible and helps you to realize that food is not victimizing *you*! Remember that you are giving up overeating in exchange for a healthier you. Don't deprive yourself of foods you enjoy in small quantities, and you won't be deprived of your goal.

Evaluate the importance of holiday foods. Ask yourself, "Is this really special?" For example, a

store-bought mince pie can't compare to Grandma's. Decide to wait and enjoy a moderate slice of her pie, since it really is a favorite of yours. Select two items that carry emotional significance, or that you just love. Taste and enjoy every bite of those foods. Forget the rest!

Reset your focus. Instead of focusing on food, direct your attention to friends and family activities. Take a walk through the neighborhood to look at decorated houses, visit a nursing home, or invite friends over to trim the tree — and serve popcorn!

When you preplan what you'll eat during the day, you'll have fewer hard decisions to make. You will be in control of food. Enjoy smaller portions of those holiday favorites less frequently, select only the important ones, and expand your horizons to avoid being focused on food. In this way, you'll have begun a new tradition — a healthier one.

Reducing Fat and Calories in Traditional Recipes

BARBARA S. BEAHM, R.D., M.S.

Adopting healthy cooking techniques need not doom you to bland and tasteless meals, or to minuscule portions. Cultivate the fine art (and science) of adapting recipes to reduce calories, fat, cholesterol, sugar or sodium. Two basic ways to modify a recipe are to change a cooking technique, or to change an ingredient.

One example of changing a cooking technique is to "sauté" vegetables in a little broth instead of oil or butter. This reduces the fat content.

To modify a recipe by changing an ingredient, eliminate it or substitute a more acceptable ingredient in its place. In many recipes, sugar and oil can be reduced by half.

The table on the next page offers guidelines for substitution and shows you how many calories you'll save for each ingredient.

CALORIES SAVED BY SUBSTITUTING FOODS

<i>Substitute</i>	<i>for</i>	<i>Calories saved</i>
1 c 1% fat milk	1 c whole milk	50
1 c skim evaporated milk	1 c heavy cream	640
1 c plain low-fat yogurt	1 c sour cream	375
1 c plain low-fat yogurt	1 c regular mayonnaise	1455
1 c blended low-fat cottage cheese	1 c sour cream	305
1 c low-fat cottage cheese	1 c whole-milk ricotta cheese	250
1 c regular cottage cheese	1 c whole-milk ricotta cheese	190
1 c part-skim ricotta cheese	1 c whole-milk ricotta cheese	90
1 c white sauce made with 1% fat milk, 2 T flour, no fat	1 c whole-milk white sauce made with 2 T flour and 2 T butter	250
1 oz low-fat processed cheese	1 oz cheddar cheese	60
2 T grated parmesan cheese	1 c cheddar cheese	60
¼ c diet margarine	¼ c regular margarine or butter	205
½ c reduced-calorie mayonnaise	½ c regular mayonnaise	480
½ c low-cholesterol egg substitute	2 large eggs	80
12 packets Equal	½ c sugar	335
2 t Sweet'n Low (or 8 packets)	½ c sugar	360

c = cup, T = tablespoon, t = teaspoon

Party Foods

Here are some lighter variations on popular party snacks and appetizers. Enjoy them in moderation!

MEATBALLS WITH CRANBERRY SAUCE

- 1 pound ground chuck
- ⅓ cup corn flake crumbs
- ¼ cup frozen egg substitute, thawed
- 3 tablespoons dried parsley flakes
- 1 tablespoon instant minced onion
- ¼ teaspoon garlic powder
- ⅛ teaspoon pepper
- 1 tablespoon low-sodium soy sauce
- Vegetable cooking spray
- ½ (16-ounce) can whole-berry cranberry sauce
- ½ cup reduced-calorie chili sauce
- 1½ teaspoons lemon juice

Combine first 8 ingredients in a large bowl; stir well. Shape meat mixture into 30 (1-inch) balls. Place on a rack coated with cooking spray; place rack in a large, shallow roasting pan. Bake at 350 degrees for 20 minutes.

Combine cranberry sauce and remaining ingredients in a saucepan; stir well. Place over medium heat; cook until thoroughly heated. Serve meatballs with sauce. Yield: 30 appetizer servings.

Calories: about 51 per meatball with 2 teaspoons sauce/protein 3.1/fat 2.2/carbohydrate 4.5/cholesterol 9/iron 0.4/sodium 45/calcium 4.

— From the Kansas Beef Council

CHICKEN TIDBITS PARMESAN

- | | |
|--|--|
| 3 tablespoons Mazola
margarine, divided | 2 cloves garlic, minced
or pressed |
| ¼ cup fine dry bread
crumbs | 2 teaspoons Dijon
mustard |
| ¼ cup grated Parmesan
cheese | 1 pound boneless,
skinless chicken
breasts, cut
in 1½-inch pieces |
| 1 tablespoon minced
parsley | |

In large skillet melt 1 tablespoon margarine over medium-high heat. Add crumbs; stir until lightly browned. In medium bowl combine crumbs, Parmesan and parsley. In same skillet melt remaining 2 tablespoons margarine over medium-high heat. Add garlic, mustard and chicken. Sauté 5 to 10 minutes or until chicken is cooked through. Remove chicken with slotted spoon; toss with bread crumb mixture. Serve warm. Makes 6 servings.

Per serving: 180 calories/19 g protein/4 g carbohydrate/9 g total fat/2 g saturated fat/50 mg cholesterol/230 mg sodium.

— From Mazola

THAI RIBBONS

- 1½ pounds beef flank steak
- ¾ cup teriyaki sauce
- 6 tablespoons vegetable oil
- ⅓ cup fresh ginger, chopped
- ⅓ cup garlic, minced
- 1½ teaspoon red chili peppers, crushed

Prepare basting mixture by mixing teriyaki sauce, vegetable oil, ginger, garlic and crushed red chili peppers. Cover and refrigerate while preparing beef. Slice beef diagonally, crossgrain, into 1/4 inch slices. Interlace each slice onto a bamboo skewer. Brush each skewer with basting mixture. Broil to desired doneness, basting once or twice. Yield: 24 appetizer servings (2 ribbons per serving).

Beef calories: 69 per serving (1 oz.); total calories: 126 per serving.

— From the Kansas Beef Council

Breads and Side Dishes

Try these delicious alternatives to sugar- and cholesterol-laden holiday treats.

CRANBERRY-ORANGE RELISH

1 package (12-ounce) whole fresh cranberries
1/2 cup frozen concentrated orange juice beverage with NutraSweet brand sweetener
1 teaspoon brandy extract
20 packets Equal tabletop sweetener, sweetened with NutraSweet

Combine cranberries, orange juice beverage and brandy extract in microwave-safe container. Bring mixture to a boil in microwave on high (100%), approximately 10 minutes, stirring once during heating.

Reduce power and continue cooking about 5 minutes until cranberries are soft.

Stir in Equal. Strain mixture, if desired. Cool to serve. Yield: 8 servings, 1/4 cup each.

Per serving: calories 45/protein 1 g/carbohydrates 11 g/trace of fat. (Diabetic exchange: 1 fruit)

— From the NutraSweet Company

CARROT BREAD

1/4 cup sugar
1/2 cup orange juice
1/3 cup corn oil
1 egg
1 1/2 teaspoon vanilla
1 cup all-purpose flour
1 cup whole wheat flour
1 teaspoon baking powder
1/2 teaspoon baking soda
1 tablespoon cinnamon
1/4 teaspoon salt
1 1/4 cups grated carrots

Beat together sugar, oil, eggs, orange juice and vanilla. Stir dry ingredients together and add to sugar and oil mixture. Blend in grated carrots. Bake in 9 x 5" loaf pan at 350°F for 40-50 minutes.

Per half-inch slice: 104 calories.

— From Barbara Beahm

Sweet Treats

Yes, you can enjoy some holiday sweets without guilt. Remember to plan in advance and not to overdo it. These lighter versions of seasonal favorites will help. How does a 33-calorie Christmas cookie sound?

CHOCOLATE MINT MERINGUES

3 egg whites
3/4 teaspoon vanilla extract
3/4 cup sugar
1/4 cup Hershey's Cocoa
Chocolate Mint Glaze (recipe follows)

Heat oven to 300°. Cover cookie sheets with parchment paper. In large mixer bowl beat egg whites and vanilla until soft peaks form. Gradually add sugar, beating until stiff peaks form (tips stand straight). Sift about half of cocoa over egg whites; gently fold until just combined. Repeat with remaining cocoa. Spoon mixture into pastry bag filled with large star tip; pipe 2-inch diameter stars onto prepared cookie sheets. Bake 35 to 45 minutes or until dry. Peel off paper; cool on wire rack. Prepare Chocolate Mint Glaze. Dip one half of each cookie into glaze; place on a waxed paper-lined cookie sheet until chocolate sets (refrigerate, if needed). About 3 dozen cookies.

Chocolate Mint Glaze: In top of double boiler, melt 1/2 cup Hershey's Semi-Sweet Chocolate Chips and 2 teaspoons shortening. Add 2 to 3 drops mint extract, if desired.

Per cookie: calories 33/carbohydrates 5/sodium 5/calcium 2/cholesterol 0/fat 1. (Diabetic exchanges per cookie: 1/2 bread; exchange calories: 35)

— From Hershey's

CHEWY COCONUT BARS

1/2 cup margarine, diet
2 eggs
18 packets Equal tabletop sweetener, sweetened with NutraSweet
1/4 teaspoon maple flavoring
1/2 cup all-purpose flour
1 teaspoon baking powder

1 teaspoon vanilla extract
 ½ cup chopped walnuts
 ½ cup raisins
 1 cup flaked coconut
 1 packet Equal tabletop sweetener, sweetened with NutraSweet
 5 maraschino cherries, sliced

Place margarine in 1-cup glass measure and microwave on high (100%) 1 minute or until melted.

Beat eggs in medium bowl until light and fluffy. To the eggs, add Equal, maple flavoring, flour, baking powder and vanilla. Add margarine and blend thoroughly. Stir in nuts, raisins and coconut. Pour into 8-inch square microwave-safe baking dish. Microwave on high (100%) 6-8 minutes; check after 6 minutes. Sprinkle with 1 packet of Equal. Bars will firm as they cool. Let cool completely before cutting into bars. Top with cherry slices. Yield: 25 bars.

Per bar: Calories 75/protein 1 g/carbohydrates 6 g/fat 5 g. (Diabetic exchanges: ½ starch, 1 fat)

— *From the NutraSweet Company*

ELEGANT CHOCOLATE ANGEL TORTE

⅓ cup Hershey's Cocoa
 1 package (14.5 ounces) angel food cake mix
 2.8 ounce package (2 envelopes) whipped topping mix
 1 cup cold skim milk
 1 teaspoon vanilla extract
 1 cup strawberry purée (recipe follows)
 Strawberries

Combine cocoa and contents of cake flour packet. Proceed with mixing cake as directed on package. Bake and cool as directed. Slice cooled cake crosswise into four 1-inch slices. In large mixer bowl combine topping mix, cold milk and vanilla; prepare according to package directions. Blend in strawberry purée. Place bottom cake slice on serving plate; spread with one fourth of topping. Stack next cake layer; spread with topping. Continue layering cake and topping. Garnish with strawberries. Refrigerate. To serve, use sharp serrated knife and cut with a gentle sawing motion. About 16 servings.

Strawberry Purée: Mash or purée 2 cups sliced fresh strawberries (or frozen berries, thawed) in blender or food processor to measure 1 cup.

Per serving: Calories 154/carbohydrates 30 g/sodium 73 mg/calcium 64 mg/cholesterol 0 mg/fat 2 g. (Diabetic exchanges: 1 starch, 2 fruits; exchange calories: 150)

— *From Hershey's*

BLENDER PUMPKIN PIE

1 (16-ounce) can solid-pack pumpkin
 1 (12-ounce) can evaporated skim milk
 2 eggs
 ½ cup biscuit mix
 18 packets Equal tabletop sweetener, sweetened with NutraSweet
 ¼ teaspoon ground cloves
 1 teaspoon cinnamon
 2 teaspoons vanilla
 1 (.92-ounce) package no-sugar-added whipped topping mix with NutraSweet brand sweetener

Grease a 9-inch glass pie plate.

Place all ingredients in blender, food processor or mixing bowl.

Blend 1 minute or beat 2 minutes with mixer. Place in bowl and microwave until thoroughly heated, stirring frequently. Pour into glass pie plate.

Microwave on Medium (50%) 15 to 20 minutes. May need to shield outer edges with foil after 5-6 minutes; then continue to cook. Pie will be done when the edges are set and the center is still slightly soft.

Let stand at room temperature about 15 to 20 minutes. Prepare whipped topping and spread on cooled pie. Yield: 8 servings.

Per serving (⅛ of pie): Calories 139/protein 6 g/carbohydrates 18 g/fat 5 g. (Diabetic exchanges: 1 starch, 1 fat)

— *From the NutraSweet Company*

Having a Big Mac Attack?

If your busy schedule necessitates a meal at a fast-food restaurant, a little care in choosing menu items can make a big difference. In general, so-called fast foods are high in calories, saturated fats and sodium and also low in fiber. A quarter-pound hamburger, order of fries and a shake quickly add up to over 1,200 calories, 42% of which come from fat.

Here are some guidelines from the book *Fast Food Facts* to help you choose a sensible meal.

- Select basic meat items such as hamburgers or broiled (not fried) chicken.
- Choose a sandwich containing just one meat patty, and put on extra lettuce and tomato. (Remember that cheese adds 100 calories per slice, and increases fat and sodium.)
- Avoid sandwiches which contain mayonnaise, since the mayo adds about 150 calories.
- A baked potato is a good main course. With 2 tablespoons of sour cream it contains 295-335 calories and is a good source of fiber, vitamins and minerals.
- Choose a salad instead of side orders of french fries or onion rings. With a "lite" salad dressing, it will add only 60 to 110 calories. (A regular order of fries contains about 220.)
- Select your beverage carefully. A 12-ounce Coke contains 155 calories, but a Diet Coke the same size has only one calorie. Low-fat milk, at 90 calories per 8 ounces, and orange juice or grapefruit juice, at 80 calories per 6 ounces, are also good choices.

For information on specific menu items at your favorite fast-food restaurants, refer to *Fast Food Facts*, by Marion J. Franz, R.D., M.S. (DCI Publishing, \$6.95).

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CARDIOLOGY NOTES

(Continued from page 304.)

Comments

The accuracy of adenosine administration seems, like most electrocardiographic criteria, to be greatest for the diagnosis of ventricular tachycardia. A specificity of 92% for the absence of supraventricular tachycardia is essentially the same as a sensitivity of 92% for the diagnosis of ventricular tachycardia.

While Sharma et al. stress some caution, adenosine is gaining acceptance as a useful adjunct to traditional approaches for the diagnosis of wide-QRS complex tachycardias. Since these studies are small, and adenosine can cause transient AV block, it would seem prudent to use adenosine where facilities are available for resuscitation, if ever needed.

REFERENCES

1. Rankin AC, et al. Value and limitations of adenosine in the diagnosis and treatment of narrow and broad complex tachycardias. *Br Heart J* 1989;62:195.
2. Sharma AD, et al. Intravenous adenosine triphosphate during wide-QRS complex tachycardia: Safety, therapeutic efficacy, and diagnostic utility. *Amer J Med* 1990;88:337.

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Adenosine for Diagnosing Wide-QRS Tachycardia

DONALD L. VINE, M.D.,* *Wichita*

Sometimes a careful evaluation of the patient and 12-lead electrocardiogram are insufficient to differentiate between those wide-QRS tachycardias which are ventricular in origin and those which are supraventricular.

Adenosine, a naturally occurring compound, can induce brief atrioventricular nodal block when injected intravenously in humans. This inhibition of conduction, which resembles the effects of verapamil, is of much shorter duration and has been evaluated as a means of differentiating wide-QRS tachyarrhythmias which utilize the atrioventricular node from those that do not.

Adenosine Infusion

Rankin and colleagues¹ injected up to 25 mg of adenosine with incremental boluses of 2.5 to 5 mg in 24 patients experiencing 28 episodes of wide-QRS tachycardia. The assumptions were that a) reentrant junctional tachycardias would be terminated; b) atrial and sinus tachycardias would persist, but the ventricular response would be slowed; and c) ventricular tachycardia would be unaffected.

In general, adenosine produced the expected effects. Among 10 of 11 patients with electrocardiographic or catheter-recorded evidence of atrioventricular dissociation (presumed ventricular tachycardia), adenosine had no effect. In the eleventh patient, the tachycardia was terminated.

Among 13 patients in whom atrioventricular dissociation could not be identified, sinus rhythm was restored in five (junctional tachycardia with aberrant conduction), two demonstrated unsuspected atrial flutter and two demonstrated atrial or sinus tachycardia. The remaining four, who did not respond, were assumed to have ventricular tachycardia, and in two of these adenosine induced retrograde ventriculoatrial block, helping to confirm the diagnosis.

*Associate Professor, Department of Medicine, University of Kansas School of Medicine-Wichita

Address correspondence to Dr. Vine, Department of Medicine, UKSM-W, 1010 N. Kansas, Wichita, KS 67214.

Electrocardiographic side effects included bradycardia, ventricular pauses, premature ventricular contractions and short runs of non-sustained ventricular tachycardia. The longest pause was six seconds, and clinically important complications were not encountered.

Symptoms included dyspnea (36%), chest pain (31%), flushing (21%) and headache (12%). There were no adverse hemodynamic effects, and all electrocardiographic and symptomatic side effects lasted less than one minute.

The authors feel that adenosine provides a "safe means of diagnosis and treatment" of patients with wide-QRS tachycardia.

Accuracy

Sharma and coworkers² rapidly injected a 20-mg intravenous bolus of adenosine in 34 patients undergoing electrophysiologic testing of wide-QRS tachycardia. Fourteen patients had ventricular tachycardia, 10 had atrial arrhythmias and 10 had reentrant tachycardias involving the atrioventricular node.

TABLE 1
USE OF ADENOSINE FOR THE DIAGNOSIS OF
WIDE-COMPLEX QRS TACHYCARDIA*

	<i>Junctional</i>	<i>Atrial flutter</i>	<i>Sinus or atrial</i>	<i>Ventricular</i>
ECO	4/5	0/2	2/3	12/14
Adenosine	5/5	2/2	2/3	13/14

* Correct diagnoses with electrocardiography alone and after adenosine administration (Correct/Total). From Rankin, 1989.

Using the criteria of tachycardia termination as a positive test for supraventricular tachycardia and failure to terminate as a negative test, the specificity of adenosine administration was 92% and the sensitivity 70%. The accuracy was increased somewhat when other findings, such as production of ventriculoatrial block, were considered.

(Continued on page 302.)

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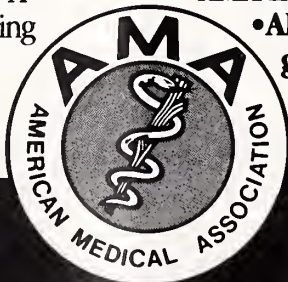
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Treatment of Male Impotence
Maternal Death Studies



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KMS Newsletter



Dr. Holwick outside of hospital where she practices as a civilian traumatologist.



Dr. Holwick in operating room at Letterman Army Medical Center.

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Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of non-susceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Hypersensitivity reactions have been reported in about 1.5% of patients and include morbilliform eruptions (1 in 100). Pruritus, urticaria, and positive Coombs' tests each occur in less than 1 in 200 patients. Cases of serum-sickness-like reactions have been reported with the use of Ceclor. These are characterized by findings of erythema multiforme, rashes, and other skin manifestations accompanied by arthritis/arthritis, with or without fever, and differ from classic serum sickness in that there is infrequently associated lymphadenopathy and proteinuria, no circulating immune complexes, and no evidence to date of sequelae of the reaction. While further investigation is ongoing, serum-sickness-like reactions appear to be due to hypersensitivity and more often occur during or following a second (or subsequent) course of therapy with Ceclor. Such reactions have been reported more frequently in children than in adults with an overall occurrence ranging from 1 in 200 (0.5%) in one focused trial to 2 in 8,346 (0.024%) in overall clinical trials (with an incidence in children in clinical trials of 0.055%) to 1 in 38,000 (0.003%) in spontaneous event reports. Signs and symptoms usually occur a few days after initiation of therapy and subside within a few days after cessation of therapy; occasionally these reactions have resulted in hospitalization, usually of short duration (median hospitalization = two to three days, based on postmarketing surveillance studies). In those requiring hospitalization, the symptoms have ranged from mild to severe at the time of admission with more of the severe reactions occurring in children. Antihistamines and glucocorticoids appear to enhance resolution of the signs and symptoms. No serious sequelae have been reported.
- Stevens-Johnson syndrome, toxic epidermal necrolysis,

and anaphylaxis have been reported rarely. Anaphylaxis may be more common in patients with a history of penicillin allergy.

- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1% and, rarely, thrombocytopenia and reversible interstitial nephritis.

Abnormalities in laboratory results of uncertain etiology.

- Slight elevations in hepatic enzymes.
- Transient lymphocytosis, leukopenia, and, rarely, hemolytic anemia and reversible neutropenia.
- Rare reports of increased prothrombin time with or without clinical bleeding in patients receiving Ceclor and Coumadin concomitantly.
- Abnormal urinalysis; elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinistix[®] tablets but not with Tes-Tape[®] (glucose enzymatic test strip, Lilly).

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In January 1935, a new logo appeared on the cover of KANSAS MEDICINE for the first time. This device represents two stethoscopes: the original monaural type as used by Laënnec, and the modern binaural variety. The logo was designed expressly for KANSAS MEDICINE by renowned graphic designer Bradbury Thompson, a native of Topeka and friend of two former editors of the journal, Dr. W.M. Mills and Dr. Lucien Pyle. As another former editor, Dr. Orville R. Clark, wrote in January 1955, the logo "has become as much a part of the journal as any of the features on the inside and is something which is ours alone."

The human mind, in an attempt to be orderly, has put names to the cycles it must live by — the solar, the lunar and the resultant changes imposed by their summed effect, the annual. This last is a recapitulation of the natural dictates: the planting, the growing, the harvesting and, finally, the resting and regenerative period. At one time, it was thought that that cycle should be considered as beginning in the spring (another name imposed by humanity), but the current usage of starting at the approximate meeting place of the resting phase and the growth phase has become, for our time, acceptable.

Those minds, however, have proceeded to make this culminating phase anything but restful — in terms, at least, of that ultimate expression of "restful," peace. At this writing, close to the source of much of the world's search for "eternal peace," we are playing out the cynic's certainty that humanity is not really meant to be peaceful, that strife and conflict are its natural condition and if they are not present, we will find them. The scene is thoroughly complex and perhaps a fitting terminal point for a year that has been tumultuous, even by the standards of a tumultuous century.

Still, Jim Hamil's tranquil winter scene serves to express one concept of peace as we visualize it. The earth is at rest, though it is a deceptive picture, since beneath the cover of snow great changes are coming about in the soil in anticipation of the seasons to come. There is beauty, as the human eye has become accustomed to recognizing it. And in the distance is a church, the structural symbol of the spiritual sense that is the essential support of mankind — whatever its various denominational forms.

Yet peace remains the unrealized goal. But the one sustenance relied on by that stubborn human mind still remains: hope. And that is what we celebrate this season. So, from those of us at KANSAS MEDICINE, our greeting for the season is, "Hope."

Elusive Verities

If we were a job counselor to the young seeking a way of life, we would advise becoming an ethicist. We are not sure just how one becomes an ethicist, but it does seem, judging by the past and present, that there will be an unrelenting demand for them in the future — and the hours should be good. Since the days when mankind was first endowed with a capacity for choice, there has been a continuing awareness of not just good or bad but goodness or badness, colored by an ineffable quality of sanctity no legal instruments can properly handle. When those early minds got that straight, they created the concept of ethics.



Since then, our prime accomplishment has been to fragment that concept according to the activity to which it is applied. Thus, we have medical ethics, legal ethics, business ethics — all varieties, including religious ethics (though it would seem that that department should have no additional need for them). Naturally, our interest focuses primarily on the first of these. Whatever has been going on in the other areas, medical capabilities have put severe stress on those hallowed rules developed by our predecessors.

Our personal observations stem not from a high state of grace in the ethics department, but simply from the observations during a reasonably, if not remarkably, long life. As we have noted before, those years must carry some kind of record for alteration of the world's condition, and the assaults on ethics have been a now-accepted and continuing part of that. Consider. Reproductive capabilities have experienced nothing less than a revolution. Granted, it is a revolution brought on by progress (a term that would be questioned by some) in many areas, but its extension into all those areas has produced dilemmas in them as well.

Parenthood was once a simple matter, generally implying a (usually) married couple and certain satisfactions and obligations. Today, the offspring may arrive as the result of a startling variety of options, all grist for the ethical (not to mention legal) mills. The most recently publicized instance involves total "surrogateness," which seems the proper term for a woman who provides the con-

ceptus of biological parents with quarters for the gestation period. Is it too much to suggest that the full gestation period will one day be accomplished *ex utero*? (The lawyers are probably already working on that.)

It seems not too long ago that the idea of organ transplants was all but unbelievable (except to John Brinkley). Yet they are now an established and expanding category of appropriate medical procedures (with gene manipulations at the ready). The ethical concerns have become not so much those of propriety but of defining the equitability of choice among contending recipients — until the day when, presumably, supply and funds (vital points in ethical contentions) will equal demand, and the ethical blessing will be acknowledged.

The far end of the life span has long been the focus of ethical problems. Questions of sustaining life or permitting its departure have been complicated by our increasing ability to accomplish the former without a clear ethical picture of how — or whether — to provide the latter. True, this has produced a plethora of "experts" on the meaning of life, and in our efforts to cope with current capabilities we are contending with age-old mores that were formed long before these new techniques were even imagined.

The limitations of life, beginning and end, are, however, simply temporal punctuations which we can recognize easily. In between, we are having to face up to crass monetary intrusions in our attempts to meet our self-imposed standards of human ethics. The grimmest manifestation of these is the idea that health care may, because of finite man- and money-power, have to be rationed. True, there has always been some form of rationing — supply, local capabilities, ignorance — but now we must adjust the uncomfortable ethical definitions to the process of rationing, which must be imposed by positive action rather than impersonal conditions.

We didn't say that the ethicist's life would be an easy or always happy one. But as the horizons of capability extend, ethicists will be in increasing demand as they pursue the effort, the probing, the questioning, the seeking of definitions and, hence, permissions and prohibitions. If they vex with their restraints, they comfort with their acceptances. D.E.G.

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Seasonal Reflections

As I near the end of my council district meetings, I sense that there continues to be a deep uneasiness among the physicians of our state. The inequities of reimbursement, the migration of physicians from rural to metropolitan communities, the constant worry of threats of litigation and sanctions, the deepening rift between specialists and generalists, the dissonance between cognitive and procedurally oriented physicians — all have had an unfavorable impact upon the satisfaction to be gained from the practice of medicine. I am often saddened to see such unhappiness spill over onto our young people, who look to us as important role models in decisions concerning their future careers.



Yet, amidst this sea of negativity there are occasional islands of hope. A western Kansas physician writes an inspired reflection of his thoughts during a prairie wedding: an acknowledgment that the stubborn fortitude of the Kansas spirit lives on. A physician editorial writer for a Topeka newspaper muses on the quiet beauty of the autumnal splendor that nature gives to us yearly in northeast Kansas. Medical students, of their own initiative, ask for acceptance in our state and national medical organizations so that they can join the battle on the issues facing medicine as they prepare to enter our profession.

And so, as we are now in this most special of religious holiday seasons, it is appropriate that we reflect on the many blessings that are present in each of our lives. Are the problems we face so unusual or so overwhelming that the Kansas spirit will be snuffed out? Perhaps it was more than a sheer coincidence that the seal adopted by the Kansas Medical Society reflects our state seal and captures our unifying motto: "Ad Astra per Aspera." Kansas medicine has survived and will survive because of the strengths inherent in our state. All of us in your society send our best wishes and the hope that "peace on earth, good will towards men" remains in the years ahead.

Joseph E. Meek, M.D.

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The Expanded Duty of a Psychiatric Health Care Provider to Third Parties

WAYNE T. STRATTON, J.D.,* *Topeka*

For the second time in less than 90 days, a Kansas court has appeared to expand traditional tort rules to enlarge the responsibility and duty of a physician or hospital. This column in the October 1990 issue of KANSAS MEDICINE reported on the Kansas Supreme Court's decision in *Arche v. United States of America*, in which the Court found there to be an action for wrongful birth. Now the United States District Court for the District of Kansas has entered a preliminary decision in a suit for damages for wrongful deaths. While the factual situation is heartrending and undoubtedly led to the Court's decision, the result is, nevertheless, expansive of the duty of health care providers to third parties.



The patient had a long and sad history of mental illness, characterized by violent and sexually deviant behavior. He repeatedly attacked other patients, as well as members of his own family. Throughout the 1970s and early- to mid-1980s, he was hospitalized in various VA centers. Eight days after he was discharged from the Veteran's Administration Medical Center, he raped, sodomized and killed a three-year-old girl and a six-year-old girl in Topeka. He had been heard to express murderous thoughts and told the psychiatrist that he needed to try to stay away from little girls.

The Court addressed the issue of the obligation of a hospital or therapist to protect potential victims of their patients from danger. Generally, there is no duty to control the conduct of another in

Am I liable if my patient harms someone?

order to protect a third person from harm. However, the Court noted the exception to the rule by recognizing that a duty arises when there is a special relationship between two persons which gives one person definite control over the actions of the other. In applying this exception to the therapist-patient relationship, the Court held that once a therapist does determine, or under applicable professional standards reasonably should have determined, that a patient poses a risk of violence to others, he or she bears a duty to exercise reasonable care to protect possible victims.

The Court appears to have extended the duty to protect to not only readily identifiable victims, but also to those for whom the therapist could have reasonably foreseen an unreasonable risk of harm. The duty to protect is no longer necessarily limited to those individuals whose actual identity is known to the therapist; the Court stated the victim may also be a member of a class of persons that is readily identifiable.

This ruling has significant ramifications for Kansas psychiatrists. It presents an immediate dilemma. Under the current statutes in Kansas, psychiatrists are allowed to warn potential victims only when "such person has been specifically identified by the patient," according to K.S.A. 1989 Supp. 65-5603(6). In its decision, however, the Court stated, "In order to satisfy the standard, plaintiff need not necessarily prove that the VA employees actually knew the identity of plaintiff's decedents."

It is not clear that this conflict in the law has been presented to the Court, and the decision may be subsequently altered. Meanwhile, Kansas physicians and hospitals must be aware of the implications of the decision and the burden cast upon them. Filing a petition for involuntary hospitalization may be appropriate in such situations.

*KMS Legal Counsel.

Comments appearing herein are not intended as a substitute for legal analysis or advice. Answers to legal questions depend largely upon the particular facts of a case. The reader is urged to consult an attorney for answers to specific legal questions.

These comments do not necessarily represent the views of KANSAS MEDICINE, or the Kansas Medical Society. For further information, contact Mr. Stratton, 515 S. Kansas, Topeka, KS 66603, 1-800-332-0248.



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RADIOACTIVE WASTE DISPOSAL

Your Help Is Needed

The disposal of low-level radioactive wastes may seem to be a minor concern among medicine's worries. But consider these facts:

- 25 to 30% of all low-level radioactive wastes produced in the U.S. result directly from medical uses.
- About 120 million nuclear medicine procedures contribute annually to low-level radioactive waste production.
- Research is a significant contributor to low-level radioactive waste production. For example, radioisotopes are used in the development and evaluation of about 90% of all new drugs.

Universities, medical schools, hospitals, laboratories and medical practices are among the producers of low-level radioactive wastes. Their activities clearly benefit individual patients and society as a whole.

Political, Not Public Health, Problem

Then why is disposal of radioactive wastes a problem?

Actually, disposal has long been more a political than a public health problem. In the 1960s, six licensed commercial facilities received wastes from across the country. After three of these facilities closed, opposition developed in the three remaining host states on the grounds that they should not be burdened with the disposal needs of the entire nation.

So in 1980, Congress passed the Low Level Radioactive Wastes Policy Act. Under this bill, each state would eventually become responsible for disposal of radioactive wastes generated within its boundaries. The act recommended that states participate in regional groupings, or compacts, to improve the cost-effectiveness of disposal facilities. It also stated that any regional facility could exclude wastes from outside its region after January 1, 1986.

For the next five years, the states moved to negotiate compacts and sign the necessary agreements. The difficulty in locating and gaining approval for disposal sites slowed progress. Remote sites might satisfy public sentiment, but their remoteness complicated disposal convenience and cost.

By 1985, it was clear that the states would not meet the 1986 deadline. Congress responded with

amendments to the Wastes Policy Act, extending the deadline to January 1, 1993. On that date, the three existing commercial sites — located in Beatty, Nevada; Richland, Washington; and Barnwell, South Carolina — will be closed to outsiders.

State negotiations have proceeded since 1985. Yet selecting a disposal site and preparing to operate a facility involves a complicated series of steps. In its 1988 informational report,* the American Medical Association Council on Scientific Affairs said those steps include legislation, government oversight, public participation, financing, engineering, supervision, surveillance and quality control. Few states are far along in this process, and fewer still are expected to meet the 1993 deadline.

Physicians Can Help

Physicians can play a key role in helping their states develop acceptable disposal facilities for low-level radioactive wastes. Their medical training can provide an informed perspective on the personal and public health risks related to waste dis-

*"Low-level Radioactive Wastes," in *JAMA*, August 4, 1989, vol. 26, no. 5, pp. 669-74.



Women's Health

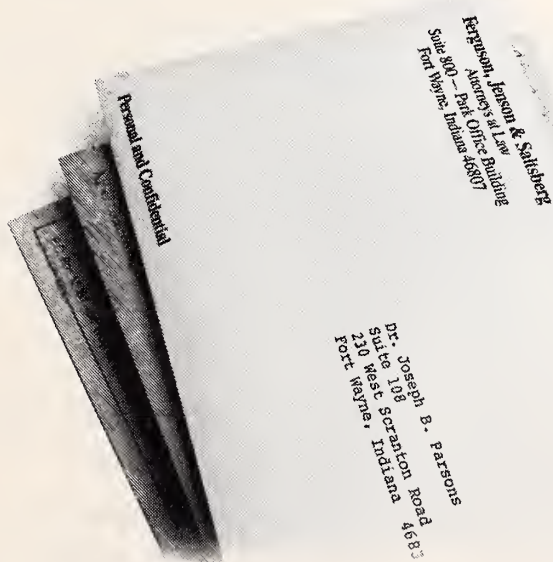
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posal. But more importantly, they can describe the beneficial uses of procedures that produce radioactive wastes, and how these uses will be compromised if disposal sites for the wastes are unavailable.

Consider becoming involved in efforts to establish disposal facilities. First, contact representatives of your state's radiation control program or health agency. Arrange to meet with them, determine whether your state is involved in a compact, and offer your support. Encourage these representatives to consider what will be done if a disposal site is not available by January 1, 1993. Stress the need to develop one or more storage sites for low-level wastes as an intermediate measure until a disposal site becomes available.

Secondly, encourage your medical society's public health or environmental health committee to become involved. Pass policy regarding the disposal of low-level radioactive wastes and then promote it. Through lobbying efforts or by working with public health authorities, the medical society can influence disposal facility plans.

Finally, physicians can help persuade their patients, the media and community groups that radioactive materials can be beneficial. Seek opportunities to lead discussions in classrooms or speak to public audiences.

For further information, contact the Division of Biomedical Science (J. Loeb, Ph.D., Director), American Medical Association, 515 North State Street, Chicago, Illinois 60610; (312) 464-5456.

RURAL HEALTH:



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Maternal Death Studies

Since its inception, the Maternal Health Committee has assumed as one of its primary functions the study of maternal deaths occurring in the state. The study includes investigation of each case, with interviews with the physicians involved, committee discussion and assignment of responsibility. Periodic publication of these studies in KANSAS MEDICINE constitutes the completion of the educational process embodied in this effort to improve the health of Kansas mothers and newborns.

The Maternal Health Committee of the Kansas Medical Society has reviewed and commented upon the following cases:

Case 1

A 32-year-old gravida III, para I, sab I was hospitalized at 38 weeks gestation with possible rupture of the membranes for three days, and mild contractions. A pitocin drip was started, and she dilated up to 8 or 9 centimeters, at which point she arrested and Cesarean section with tubal ligation was done. Estimated blood loss was 600 cc's. Prophylactic antibiotics were given, and her course was normal until the third postoperative day, when she spiked a temperature of 101.2° and complained of some pelvic pain. I.V. antibiotics were restarted. On the fourth postoperative day, laboratory results of WBC 12,900; polys 81%; Hgb 7.4; Hct 21; normal platelets; creatinine 1.9; and a negative blood culture were secured. Two units of blood were given. Gentamycin, vitamin K, calcium gluconate and cortisone were all given. The abdomen was distended without nausea or vomiting.

On the fifth postoperative day, the laboratory reported the following: Hgb 8; Hct 22; platelets 16,000; a repeat platelet count of 10,000; fibrinogen 292; bleeding time 15 minutes; PTT 26; PT 14. The urine was dark brown and turbid with 4+ protein, 4+ blood. Three more units of packed red cells and 10 units of platelets were given. Later in the day, the platelets were 9,000 and the B.P. was 164/100 and she was transferred to a major metropolitan hospital.

That same day at the receiving hospital, a direct Coombs and antibody screen were negative and the BUN was 80; creatinine 3.0; Hgb 8.9. The urine output was 15-30 cc's, even after receiving lasix. Nephrology consultation was obtained and

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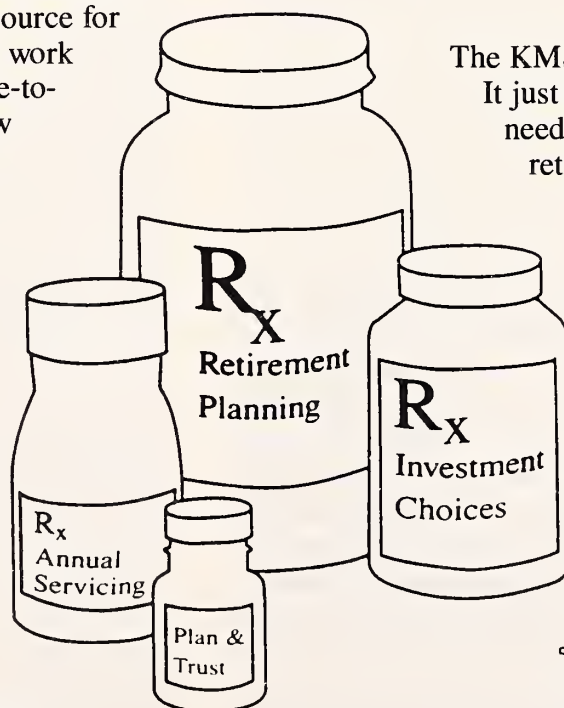
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a working diagnosis of hemolytic uremic syndrome was made.

On the sixth postoperative day, she was transferred to the nephrology service, where various other tests were secured, confirming the ongoing anemia and thrombocytopenia. The liver was palpable three centimeters below the right costal margin and tender to palpation. Her status was consistent with postpartum hemolytic uremic syndrome as evidenced by a Coombs negative hemolytic anemia, signs consistent with DIC, oliguria, renal failure, mild increase in liver function tests and fluid overload with CHF. Treatment plans were initiated to decrease fluid intake; continue supportive care; administer Captopril and initiate plans for renal dialysis and plasmapheresis.

At 3:00 a.m., she became disoriented, confused and agitated, thrashing in bed and not responsive. She became apneic and after 45 minutes of Code Blue, resuscitative efforts were stopped and the patient was pronounced dead.

Autopsy diagnosis was postpartum hemolytic uremic syndrome with brain edema, uncal and tonsillar herniation.

Committee opinion: Maternal death, directly related, not avoidable.

Case 2

A 29-year-old gravida II, para I at 12 weeks gestation was found dead in her bathroom at home. She weighed 250 pounds and had required hospitalization twice in this pregnancy for hyperemesis and had been unable to work because she was too sick. Autopsy findings were those of a massive pulmonary embolus.

Committee opinion: Maternal death, directly related, not avoidable.

Comment: The obesity was a contributing factor.

Case 3

A 37-year-old gravida IV, para III patient was admitted at 39 weeks gestation in active labor. The last pregnancy was two years earlier and was delivered by Cesarean section, due to severe fetal distress and moderate anemia during the pregnancy. Her initial prenatal lab, at approximately 19 weeks gestation, revealed a Hgb of 8.16 and Hct of 26.8. She frequently missed appointments and consistently had an 8 gram hemoglobin. It was doubtful that she took her prescribed iron. It was reported that she smoked and drank two bottles of wine each week.

Following admission, she dilated rapidly and experienced a great deal of discomfort, in spite

of an epidural block. Eighty-five minutes after admission, bright red blood was seen on a pad, FHR decelerations were noted and a decision was made to do a Cesarean section. Six minutes later, she complained of her throat hurting and trouble breathing and one minute later she was unresponsive. General anesthesia was secured and the Cesarean section was started. Twelve minutes after she became unresponsive, a live male infant weighing 10 pounds, 10 ounces with apgars 1/0; 5/0; 8/2; 10/2 was delivered. He was discharged alive from the hospital. Extensive resuscitative measures of the mother were undertaken including CPR, 4,000 cc's of fluid and 14 units of blood. Estimated blood loss was 7,000 cc's. Ninety minutes after she became unresponsive, she was pronounced dead.

The autopsy findings indicated that sections of both lungs had prominent changes of amniotic fluid embolism characterized by extensive involvement of the pulmonary microvasculature by amniotic fluid debris, including clumps of keratinous and squamocellular material. Focally, larger blood vessels were distended by amniotic fluid debris.

Committee opinion: Maternal death, directly related, not avoidable.

Comments: The patient's lack of compliance by failure to keep scheduled appointments and take her prescribed iron are noted. In addition, her reported wine consumption and cigarette smoking may have indicated a state of poor nutrition.

Case 4

This patient was 23 years old. She had a left hemipelvectomy in 1982 due to osteogenic sarcoma. She had had two episodes of sickle cell crises. She also had diabetes controlled by diet and was obese. She was not aware that she was pregnant with this, her first pregnancy, when she presented at the emergency room with abdominal pain in 1988. This was 11:30 p.m. FHTs were not heard and a sonogram showed fetal demise. Blood drawn at 12:45 a.m. showed a pH 6.88; PCO₂ 14; PO₂ 166; potassium 6.5; Hgb 2.1; Hct 7.6; WBC 49,700. At 1:02 a.m., she suddenly had a respiratory arrest. She was intubated and CPR was started, which was unsuccessful. Forty-two minutes later she was pronounced dead.

Anatomic diagnoses were: Sickle-trait beta thalassemia by clinical history; anemia; chronic renal failure; 32-week-old fetus; fetal death in utero, less than 48 hours prior to mother's death, with meconium-stained amniotic fluid, small pla-

centa and placenta accreta; splenomegaly and hepatomegaly with sequestration of sickle cells. The patient's kidneys were consistent with end-stage chronic glomerular sclerosis.

The recent infant death in utero may have further complicated her condition, such that she became sufficiently hypoxic and acidotic, and developed massive intravascular sickling, leading to the final outcome.

Committee opinion: Maternal death, directly related, not avoidable.

Case 5

A 26-year-old gravida II, para I with one previous normal pregnancy delivered by Cesarean section presented at her physician's office at 36 weeks gestation with light contractions, light bloody show and a cervix dilated 2–4 cms. She also had severe condylomata of the vagina and cervix. Cesarean section delivery of a 5-pound, 14-ounce infant with apgars of 9/9 was accomplished. The Cesarean section was technically difficult because of large adnexal varicosities, particularly on the left, and a rather large venous sinus on the left side of the uterus which required several sutures in closing. A left fimbriectomy was needed as part of the repair and establishment of hemostasis. In addition, the lower uterine segment was very thin and difficult to close. There was lots of scarring in the pelvis. The estimated blood loss during the Cesarean section was 600 cc's. Postoperatively, she suffered a drop in hemoglobin to 8.3 gms and developed hemodynamic instability and was returned to the operating room for exploratory laparotomy after packed red blood cells were started. A large number of clots were removed, and the bleeding point of the left uterine artery was ligated. During this surgery, she became hypotensive and bradycardic. Consultation was obtained, and she was noted to be cyanotic, hypotensive, and in marked sinus bradycardia with no palpable pulse. CPR was started and continued with the usual measures. Very low arterial saturations were noted. Approximately 75 minutes later she stabilized. It was suspected that she had a large pulmonary embolus which had begun to break up. She stabilized in terms of her blood pressure and cardiac rhythm and rate. However, she remained unconscious with fixed, dilated pupils. She was transferred to a major metropolitan hospital and was brain dead on arrival. Aggressive support was continued at the receiving hospital until the neurologist could confirm the clinical impression of the neurologic disaster. Multiple

units of blood products for DIC were given. Pulmonary angiogram revealed multiple large pulmonary emboli bilaterally. Life support systems were terminated, and the patient was pronounced dead.

No autopsy was done.

Committee opinion: Maternal death, directly related, not avoidable.

Case 6

An 18-year-old patient of unknown gravidity in terms of our information, underwent a therapeutic abortion at approximately 4 months of pregnancy. This was done in a physician's office. She was premedicated with 800 mg of Motrin and 10 mg of Valium and prepared with a paracervical injection of a local anesthetic containing 2% Pituirim. The abortion was carried out uneventfully. The decedent was in the recovery room in bed when she was observed to attempt to sit up, gasp for breath, hyperventilate, and then enter into a grand mal convulsion. Following the convulsion, she was in profound shock. Ambulance attendants were called and responded within 5 minutes. Oral intubation was done, a jugular IV was started and the patient was transported to the hospital. The patient remained in shock on arrival at the hospital. CPR was started, and she showed some improvement in blood gases but no other significant response was noted. Cardiopulmonary resuscitation was finally stopped, and the patient was pronounced dead.

Autopsy Report: The significant changes were confined to the lungs. Both right and left lungs were seen to be extensively atelectatic. When the airway was opened, it was found to be largely filled with vomitus. This material extended all the way to the oral pharynx, and at least a cup of the material was free in the mouth and posterior pharynx. Aspirated gastric content was found even in the very small peripheral bronchioles. No evidence of mechanical perforation was noted in the reproductive organs.

Committee opinion: Maternal death, directly related, avoidable.

Comment: It was the opinion of the Committee that both patient and health care provider were responsible. The patient should have sought an abortion earlier in her pregnancy and possibly prepared herself better by having an empty stomach. It was felt by the Committee that the original grand mal seizure was related to medication (paracervical injection of a local anesthetic containing 2% Pituirim). It was felt that termination of a

4-month pregnancy should be undertaken in a more sophisticated facility than a physician's office. In addition, equipment and drugs should be available to treat potential complications of the drugs that are used.

Case 7

A 23-year-old gravida II, para 0, tab I at 24 weeks gestation by history was brought to the hospital by her boyfriend after being found by him at her home in a combative, delirious state. It was reported that she had been in relatively good health until the morning of admission, when she developed some symptoms of an upper respiratory infection. An earlier sonogram was read as demonstrating a fetus too small for the gestational date. Office blood pressure two weeks prior to admission was 114/80.

On admission to the hospital emergency room, she was semiconscious, unresponsive and unable to move her left arm or leg. The blood pressure was 210/110 and the platelet count 96,000. Apre-soline, magnesium sulfate and Narcan were administered. The emergency room reported that her respiratory rate decreased, she became cyanotic and was intubated. She was transported by air to a major metropolitan hospital in another city. At the time of the transfer, the patient did not move her left side and had no reflexes on the right or left. Her pupils were reactive and sluggish, but equal. Magnesium sulfate was discontinued. The patient was transported on a ventilator. When she arrived at the receiving hospital, her condition was essentially unchanged. Admission laboratory results: Hgb 15.4; WB 38.2; PT 19; PTT 34; platelets 122; fibrinogen 101 (all findings felt compatible with DIC); magnesium 24.6. Liver function studies were all consistent with marked reduction of liver function. Sonogram showed no fetal heart movement. Portable chest x-ray showed progressive noncardiogenic pulmonary edema. A CT scan showed evidence of multiple intracranial hemorrhages, together with severe cerebral edema. She was started on Mannitol and Decadron. Later she developed a hypotensive episode and was started on Dopamine IV. She failed to respond and was begun on dobutamine in an effort to maintain her systolic BP. Albumin, Ringer's lactate and 2 units of packed red blood cells were given. Her BPs were maintained but there was no evidence of brain activity. Respiratory support was discontinued, and the patient was pronounced dead. On the day after admission at the receiving hospital,

the fetus was delivered stillborn after prostaglandin induction.

Autopsy Report: Pathological diagnosis: 1) 14-week pregnancy, recent expulsion of fetus; 2) necrosis of the liver, jaundice; 3) subarachnoid, intracerebral and interventricular hemorrhage; 4) pulmonary edema, diffuse, marked; 5) hepatomegaly, 2100 grams. It was felt that the cause of death was cerebral hemorrhage due to toxemia of pregnancy.

Committee opinion: Maternal death, directly related, not avoidable.

Comment: The Committee was concerned about the reported serum magnesium level at the receiving hospital and whether this might have played some role in the level of consciousness of the patient. In addition, there was a history of the patient possibly using illegal drugs in the past.

Case 8

A 32-year-old gravida IV, para I, ab II was seen initially at 8 weeks for prenatal care. Ultrasound done at that time was interpreted as showing a bicornuate uterus with the pregnancy in the left horn. Her only delivery had been by Cesarean section because of breech presentation. Prenatal laboratory secured at her initial prenatal visit was normal. She was seen again at 14 weeks with normal findings. At 18 weeks of pregnancy, she noted slight vaginal bleeding for three days after feeling very bad for the past two weeks. She had not felt movement for several days. She saw the physician and was admitted to the hospital the same day. A sonogram revealed a fetus that apparently had been dead for approximately two weeks. On admission to the hospital the Hgb was 13.1; Hct 38.1; platelets 206,000; WBC 9,900 with a normal differential and negative urinalysis.

The next day, induction of labor was performed with the use of prostaglandin vaginal suppositories, and a macerated fetus was delivered just before midnight. The placenta could not be delivered at that time. The next day, 12 hours after the fetus was delivered, a pitocin drip was started and a D&C was performed. A ring forceps and a large curette were used to accomplish the D&C. The patient was afebrile after the operation. She had no problems until 15 hours after the D&C, when she became sweaty with a rapid heart rate of 140 and cool and clammy skin. She complained of cramping with gradually increasing pain, mostly in the lower left quadrant. Six hours after the onset of the rapid heart rate, it was recommended to the patient that abdominal surgery be done



KANSAS MEDICAL SOCIETY

Newsletter

DECEMBER 1990

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IDENTIFICATION AS CHIROPRACTIC PHYSICIAN WILL NOT BE ALLOWED

A Board of Healing Arts decision that had been in effect since 1983 was reversed this month, when the board voted not to allow the term "chiropractic physician" to be used in conjunction with "chiropractor."

At its meeting a year ago, the board voted to table the question for a one-year period in order to allow the Chiropractic Association to lobby the Legislature for an endorsement of the terminology. Prior to this year's meeting, each board member received a letter from the board's president, Franklin G. Bichlmeier, M.D., which explained the history of the issue, concluding that: "The Chiropractic Association failed to obtain any form of legislative endorsement of the phrase 'chiropractic physician'. Instead, the 1990 Legislature specifically rejected an attempt to define 'physician' in a manner that would have included chiropractors." Dr. Bichlmeier's letter also served notice to the board members that he would bring the issue up for discussion and action at the December meeting.

Board member Edward J. Fitzgerald, M.D., offered a motion to endorse Attorney General's Opinion 87-42, which says in pertinent part that "the term 'chiropractic physician' is misleading to the public, as it implies that a chiropractor is licensed to practice beyond the scope of the statutory definition of chiropractic." In spite of an abstention by a D.O. member of the board and one M.D., who voted against the motion, Dr. Fitzgerald's motion prevailed.

MEDICARE NEWS

Two changes will take place in January:

Bonus payments for physician services in Health Manpower Shortage Areas are to increase from 5% to 10%. Remember that these must be claimed to be paid.

MAACs will be replaced by 125% of the Medicare non-participating prevailing charge limits. Make your Medicare participation decision carefully!

BLUE CROSS/ BLUE SHIELD UPDATE

The KMS Third-Party Payor Liaison Committee met with BC/BS in late November to discuss issues raised by our membership upon receipt of their 1991 policy memos. The following items are for clarification:

- * When x-rays are performed in a physician's office, rather than at a hospital, BC/BS will pay a global, all-encompassing fee and will not reimburse the professional and technical components separately.

- * There is no separate reimbursement for an attending physician's explanation to the patient of an interpretation of an x-ray or pathology made by someone else. This is content-of-service of the office visit.
- * BC/BS clarified the issue regarding their right to review records of non-BC/BS subscribers, as follows:
 1. There is no intent to audit office records routinely. This will be done only upon receipt of an official complaint, and the option will be exercised judiciously.
 2. BC/BS will review only billing records, not medical records, and only to ensure that the BC/BS subscriber was not billed any more for a service than someone else.
- * At its December 13 meeting, the BC/BS Board of Directors voted to reimburse laparoscopic cholecystectomies at the same rate as the open procedure. In addition, the board rescinded the previously published policy for 1991, which required clinical lab and cytopathology to be billed only by the performing provider. With this change, only anatomical lab procedures must be billed by the provider who renders the service. BC/BS will review reimbursement policies for lab procedures during 1991, and adjustments to lab fee schedules are expected for 1992.

ADULT CARE HOME OCCUPANCY IN KANSAS

According to a special report on long-term care from the Kansas Health Care Association, adult care home occupancy in the state is dropping. KDHE statistics reveal that the statewide occupancy rate for skilled, intermediate and personal care homes stood at 86.78% (ICF/MRs excluded in this and the following statistics) in the second quarter of 1990, the latest quarterly tabulation available. This is the lowest quarterly occupancy rate recorded since the sunset of Kansas' CON law. Occupancy rates a year earlier, in the second quarter of 1989, were 88.06%, or 1.28% higher. The occupancy rate has dropped in each of the last four consecutive quarters.

For the same period, however, the number of actual inpatient days has increased to 2,254,475 total inpatient days in the second quarter of 1990, compared with 2,233,979 total inpatient days during the same period in 1989. This represents slightly less than a 1% increase. There were 28,555 licensed beds in the second quarter of 1990, compared with 27,927 in the same quarter of 1989.

It should be noted that occupancy rates vary greatly between counties. For instance, Johnson County had an average occupancy rate of 72.5% in the second quarter of 1990, whereas Reno County had an average occupancy rate of 96.66%.

PHYSICIANS CAN HELP IN ERADICATION OF MEASLES

A recent article in American Family Physician notes that family physicians can help to reverse an increase in measles that reached over 17,000 cases in 1989. The author outlined the new measles immunization guidelines from the CDC and wrote: "Progress in the eradication of measles in the United States is contingent on the full implementation of revised recommendations." The new guidelines include a recommendation that most children receive an additional measles vaccin-

ation before entering school, unless a local health department or a physician has recommended otherwise. Students entering college and persons beginning medical employment should receive two vaccinations unless they have recorded evidence of immunity.

The author of the article noted that by 1985, measles vaccines were estimated to have saved more than 5,000 lives and prevented 17,000 cases of mental retardation, while saving more than \$5 billion in health care costs.

CONSIDER BECOMING A "TEENAGE-TRICIAN"

Arvind K. Goyal, M.D., President of the Chicago Medical Society, devoted a recent column in Chicago Medicine to care of teenagers, recommending that those physicians who routinely treat young people become "teenage-tricians." Such a 'specialist' would be sensitive to the following expectations of young patients:

- * Understand teen problems, appreciate various aspects of the teen culture (dress, language, etc.) and be accepting of teens' preferences.
- * Be sensitive to teens' special needs and maturing opinions.
- * Act like a doctor and friend, not like a parent. Teens want to be treated as adults.
- * Use extreme tact and discretion when teens confide in you. They may not want this information shared with their parents.
- * Trust the teenage patient. Do not assume that every teen drinks, smokes or uses drugs.
- * Give honest answers, even to difficult questions.
- * Be available when a teen needs to see or talk to you.

Dr. Goyal observes that a professional encounter with a teenage patient may also be an opportunity to review and upgrade the teen's immunizations; discuss contraception, prophylaxis against diseases, and the health virtues of smoke-free air, a drug-free environment and a gang-free neighborhood. And he adds that no additional training is required to take good care of teenagers. "Each of us can be a 'teenage-trician,'" he concludes.

AND FROM A TEEN'S POINT OF VIEW...

In a similar vein, a 16-year-old girl wrote to the New England Journal of Medicine regarding a meeting with her anesthesiologist prior to surgery. In the presence of her parents, she was asked if she uses recreational drugs, drinks or smokes. This "could prove to be very dangerous if an adolescent who takes drugs, drinks or smokes is unable to be frank with the doctor while the parents are listening," wrote the girl. "I suggest that doctors review their practices so that minors can speak with them privately, to ensure that appropriate safety precautions can be taken during surgery."

SODIUM NITROPRUSSIDE LABELING

FDA has approved new labeling for sodium nitroprusside (SNP) to highlight the risk of potentially lethal cyanide toxicity associated with extended use of the drug. The revised labeling also reflects new clinical knowledge attained since the drug was approved in 1975.

Approved indications for SNP remain unchanged: immediate

reduction in blood pressure of patients in hypertensive crises, and controlled hypotension in order to reduce bleeding during surgery.

According to the labeling, significant adverse reactions to SNP include excessive hypotension and cyanide toxicity. Thiocyanate toxicity is also a risk, but a minor one. These adverse reactions should be anticipated and avoided by careful calculation of appropriate infusion rates and continuous patient monitoring. If patients are not properly monitored, SNP can cause precipitous decreases in blood pressure leading to irreversible ischemic injuries or death.

The revised labeling is available from the drug's two manufacturers. Nitropress is made by Abbott Laboratories, 708-937-3807. Nipride information is available from Roche Laboratories, 201-235-2355.

YOUR PATIENT MAY NOT HAVE THE FLU

With the onset of cold and flu season, some farmers may think they have the flu when, in fact, they have "farmer's lung," (hypersensitivity pneumonitis), an allergic reaction due to repeated exposure to moldy grain. If unrecognized, warns the National Jewish Center for Immunology and Respiratory Medicine, it may result in progressive lung scarring, with severe shortness of breath and incapacitation.

Farmers and ranchers are regularly exposed to mold spores and bacteria from grain, which can cause this flu-like illness. The symptoms of farmer's lung--fever, cough, muscle aches, and shortness of breath--often do not appear until four to eight hours after exposure to the grain, making the illness difficult to recognize.

CONGRATULATIONS

...To Lillian Gonzalez-Pardo, M.D., associate professor of pediatrics and neurology at KUMC-KC, who was voted president-elect of the American Medical Women's Association at their annual meeting last month. Dr. Gonzalez-Pardo will serve as president-elect of the 12,000-member organization during 1990-91 and then as president for 1991-92. This is the first time in the association's history that a Kansan or an Asian American has been elected to the office.

...And to David Brake, M.D., associate professor of radiology at UKSM-Wichita, who has been named chairman of the UKSM Department of Radiology. Dr. Brake will continue to serve as medical director of the Department of Radiology, as well as director of the Computerized Tomography Section at HCA Wesley Medical Center.

CORRECTION

The listing for Topeka internist Jean Liesmann, M.D., in this year's KMS Membership Directory contains the wrong telephone number. Please note that the correct number is 354-9591.

Season's Greetings

The KMS Executive Committee and Staff hope that you are enjoying the holiday season and wish you a happy new year. We look forward to working with you in 1991.

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because of the persistent severe lower abdominal pain. An ultrasound done at that time did not reveal any remaining tissue in the uterus. The urine output diminished rapidly in volume and became a dark, bloody color. She was treated with Flagyl, Vibramycin and Ceftazidime with no apparent results. She developed petechiae on the trunk and lower extremities and a purplish discoloration of the skin. Five hours after the recommendation for abdominal surgery, lab work revealed: Hgb 8.8; Hct 22; WBC 19,900 with 82% polys and 6 metamyelocytes; platelets 39,000; prothrombin time 70 seconds; PTT greater than 100 seconds; fibrinogen 15 mg%.

At this time, the diagnosis was severe disseminated intravascular coagulation. She was treated with packed red cells, platelets, fresh frozen plasma and cryoprecipitates and Heparin. Six hours after the earlier lab work, the red cells were 1.12 million; Hgb 4.4; Hct 7.7; WBC 12,300. Her condition continued to deteriorate and after further consultation, it was decided to try surgery to find the source of the sepsis.

While being prepared for surgery, she developed a bradycardia and loss of blood pressure. All attempts at resuscitation were to no avail. She was pronounced dead at 11:15 p.m., 48 hours after delivering the macerated fetus. Blood and intrauterine cultures all came back positive for *Clostridium perfringens*.

Autopsy Report. Bicornuate uterus with enlargement of the left horn compatible with recent pregnancy; retained fragments of necrotic placenta containing numerous clostridial organisms and clostridial myometritis with necrosis and uterine perforation. *Clostridium perfringens* septicemia. Fibrin thrombi involving glomerular capillaries, extensive consistent with DIC. Acute tubular necrosis.

Final diagnosis: Clostridial sepsis followed by D&C secondary to fetal death in utero.

Committee opinion: Maternal death, directly related, avoidable. Physician responsibility.

Case 9

A 39-year-old patient of unknown gravidity and parity was found dead in her bed in her room by the landlady. The house was locked from the inside. The moderately decomposed body of the decedent, along with a premature infant still in the amniotic sac and some prolapse of the uterus was found. There was no evidence of drugs in the house. The decedent had told her parents six days earlier that she was pregnant but did not seem unhappy about the pregnancy. They felt their

daughter was a happy person and not the type to consider suicide. She had seen a physician for a brief introductory visit six days prior to the day her body was found. The fetus was a male still-born infant weighing 1350 grams. There were no fetal anomalies.

Autopsy Report: Pathological diagnosis: decomposed pregnant white female adult, prolapse of uterus, expulsion of fetus and placenta; exogenous obesity; fibroid tumor of myometrium, large.

External examination: There was a large, white, fibroid tumor in the myometrium. No injuries or natural disease was evident. The pathologist reported there were no marks on the cervix or any place that would indicate an attempt at terminating the pregnancy. It was his thought that the prolapse of the uterus could cause the decedent to go into shock, which might explain the fact that she made no phone calls for any type of help.

Committee opinion: Maternal death, directly related, possibly avoidable. Patient responsibility — obesity and lack of prenatal care.

Comment: The Committee wondered if the pathologist was describing an acute inversion of the uterus.

Case 10

A 19-year-old patient, gravida I, para 0 had intercourse the night of admission and noted some vaginal bleeding afterwards. She was admitted at 3:30 a.m. because of contractions and a pregnancy by sonogram of 31 to 32 weeks gestation. Tocolysis was initiated with ritodrine. Genital culture was done which showed the presence of group B beta hemolytic streptococcus, and she was started on Ampicillin 1 gm IV q6h. The ritodrine was increased to the maximum dose, but she continued to contract. Ritodrine was discontinued and magnesium sulfate was started and ultimately increased to 4 grams/hour. The contractions continued, and arrangements were made for transfer by helicopter. The last magnesium level before transport was 4.2.

Betamethasone 12 mg IM \times 2 was given at the transferring hospital. In addition, an initial subcutaneous dose of terbutaline was given before starting the IV ritodrine. Prior to transport, it was recorded that the patient complained of difficulty breathing, with coughing.

While in transport and approximately 10 minutes before arrival at the receiving hospital, she became combative. On arrival, she was combative and coughing. She subsequently coughed up pink-colored sputum. While being taken to the emergency room, she suffered a respiratory arrest and

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was taken to the "crash room" and intubated. Copious amounts of pink, frothy sputum were produced in the endotracheal tube, which had to be suctioned. Oxygen was given through the endotracheal tube by bag. A pulmonary consultant was called and assumed care for the respiratory status. IV Lasix was given.

The patient was stabilized. Pelvic examinations demonstrated cervical dilation of 5 cm (4 cm prior to transfer). She was transferred to intensive care.

At the time of intubation, she was oriented and communicated by means of gestures, due to the intubation. The chest had bilateral rales. The heart had a regular rhythm of 150 beats per minute. The uterus was not contracting in the ER, but began contracting on arrival in ICU. The uterus was nontender. The extremities showed normal reflexes and no edema. On repeat exam, the cervix was 100% effaced and 6 cm dilated with a cephalic presentation at 0-1+ station.

Laboratory: Blood gases on admission were: pH 7.25; pCO₂ 52; PO₂ 39; oxygen saturation 64; base excess -5; total CO₂ 24. CBC on admission showed 18,000 WBC (12,900 the next day); H/H 10.9/33. H/H fell to 8.5/24, at which time she was transfused with 2 units of packed cells and her H/H remained stable at approximately 10.5/30. Urinalysis was unremarkable on admission except for 20-50 white cells. Chemistry profile was essentially normal, except for an elevated LDH. Chest x-ray on admission showed "diffuse alveolar infiltrates with satisfactory endotracheal tube placement and moderate gastric distension." Subsequent x-rays showed subcutaneous emphysema and some improvement in the infiltrates. Later, there was a pneumomediastinum, subsequently alveolar consolidation, and still later, infiltrates consistent with ARDS. Pneumothorax was noted on x-ray later in the hospital stay.

It was believed that the baby needed to be delivered. It had already been exposed to hypoxia during the respiratory arrest and the maternal oxygen levels were still not good. It was felt that the baby could be delivered vaginally almost as rapidly as with C/S. The arterial oxygen levels were improving, and finally there was concern that the C/S would be detrimental to the maternal health. A 1910-gm viable infant with Apgars of 3/6/8 at 1/5/10 was delivered, was intubated and transferred to NICU, where it did well and was later discharged.

After delivery, pulmonary care was provided to the mother by the pulmonary consultant. She developed a temperature of 102°. She continued to

be febrile postpartum. Antibiotics were started. She was continued on PEEP, which gradually had to be increased. She required increasing FiO₂s. She was heparinized for possible septic thrombophlebitis. She was placed on cooling blankets to keep her temperature stable. WBC gradually rose to 49,000. A Swan-Ganz catheter was put in place. A pneumothorax occurred on the right, and a chest tube was placed. She later developed a cardiac dysarrhythmia and cardiac arrest, from which she was resuscitated. A left chest tube was put in place. She expired 48 hours later, and 13 days after being admitted to the original hospital.

Autopsy report/diagnosis: Diffuse alveolar damage of the lungs, bilateral, organizing stage, typical of the adult respiratory distress syndrome. Status following recent vaginal delivery: Acute chorioamnionitis of the placenta, focal, mild. Pulmonary emboli, right lower lobe, venous thrombi, right parametrium, extensive, right ovarian vein and right renal vein.

Comment: Death is due to respiratory failure. The etiology of the diffuse alveolar damage is being investigated. The pulmonary emboli are not, at this time, believed to have been directly or indirectly responsible for the death.

Committee opinion: Maternal death, directly related. The Committee at this time felt that they did not have enough information available to make a decision as to whether it was avoidable or unavoidable.

(The Committee recommends to Kansas physicians that when completing death certificates, a notation concerning patient's possible pregnancy be noted on the certificate. The Committee recommended that hospital medical records departments be so advised. The Committee then recommended that KDHE include on the Kansas Certificate of Death a question: "Was this patient pregnant within a year of death?")

Case 11

A 26-year-old gravida III, para II patient was seen in the second month of her pregnancy. Her two previous pregnancies had been delivered by Cesarean section. A cerclage had been done in one of the previous pregnancies, for unknown reasons. Her pregnancy up until the terminal event was normal and included normal prenatal lab. A sonogram done in the fourth month was "negative." The patient's husband reported the patient had a slight headache the night prior to the terminal event.

At approximately six months of pregnancy, the

patient called the obstetrician's office early in the morning, stating that while she was brushing her teeth something popped in her head. The patient realized something was wrong and arranged for a neighbor to take care of her children. The physician called 911. On arrival the vitals on the 911 report were BP 140/80, pulse 104, pupils dilated, verbal response inappropriate. The patient was showing some response to verbal stimuli, but quickly became unresponsive. The second 911 vitals were BP 138/60, pulse 56 and irregular, pupils dilated, and patient unresponsive. No drug bottles or paraphernalia were found on the scene.

On arrival at the emergency room, she required assisted ventilation and was intubated and bagged. No spontaneous respiratory efforts were noted. She was unresponsive, with widely dilated, unreactive pupils. Deep tendon reflexes were absent, and there was no Babinski. Heart rate was 120, regular, and the BP 120/60.

Laboratory & x-ray: SMA was normal. Blood gases showed a PCO₂ of 30 and a PO₂ of 55. Blood alcohol level was 0. PT and Ptt were normal. Hemoglobin 11.6, Hct. 35.7, Wbcs 15,400 with 62 segs, 2 bands, 33 lymphs and 3 monos. Drug screen was positive for marijuana. Chest x-ray showed the endotracheal tube to be in a satisfactory position. A right upper lobe atelectasis was noted, which subsequently resolved. CT scan showed evidence of massive acute intraventricular hemorrhage. This appeared to have risen from the deep white matter on the right. No shift of midline structures was identified. An EEG was interpreted as being an electrocerebral silent electroencephalogram.

Consultation for the management of diabetes insipidus with excessive urine output and a serum sodium of 166 was secured. Consultation for ventilator management was also requested.

Ventricular tachycardia which threatened the mother's, and therefore the infant's, immediate survival developed. A decision was made to perform a Cesarean section on the day of admission, and the delivery was accomplished without difficulty. An infant consistent with 26 weeks gestation was delivered. The infant was electively intubated at 30 seconds of age. Apgar at one minute was 6 and 8 at 5 minutes. It was transferred to NICU and ultimately was transferred to a NICU at another hospital. The outcome was unknown.

After delivery, she continued to show no evidence of neurological recovery. After discussion with the patient's husband and other family mem-

bers, it was decided to discontinue respiratory support. She was pronounced dead 25 hours and 40 minutes after admission.

Autopsy report: No autopsy was done.

Final diagnosis: 1) Intraventricular hemorrhage; 2) Cardiopulmonary arrest secondary to intraventricular hemorrhage; 3) Diabetes insipidus; 4) Delivery of live female infant.

Committee opinion: Maternal death, directly related, unavoidable.

Case 12

A 34-year-old gravida IV, para I was hospitalized at 37-plus weeks gestation with spontaneous rupture of membranes and mild contractions. Her past history revealed that she had two spontaneous abortions in 1974 and 1975. Her one full-term, normal pregnancy was delivered in 1976 and was marked by hyperemesis and pre-eclampsia. Her prenatal course, laboratory studies and sonograms were all normal. She was admitted at 12:40 a.m. with a moderately thick cervix dilated 2-3 cms. Admission blood count was Hgb. 10.9 gms and Hct. 33.4%. Throughout the day she continued to have contractions every 3-4 minutes that were mild to moderate, and her cervix remained essentially the same. At 8:15 p.m. prostaglandin gel, 2 mg was inserted in the vagina by the physician, and a scalp electrode was applied to the fetus. The contractions increased, but the cervix remained essentially the same, and a decision was made to do a Cesarean section. Blood pressures throughout the labor remained 120/76 to 128/84.

At 12:01 a.m., almost 24 hours after admission, the infant was delivered. The Cesarean section was entirely normal, except for a very severe bogginess of the uterus, which did not respond to pitocin 10 units IV push and 30 units IV drip. She had a slight increase in blood pressure to 130/86, and a decision was made to give 15 methyl prostaglandin, which was injected into the uterine wall. The uterus did not respond to rubbing, so methergine 0.2 mg was given I.M. The uterus remained very large, boggy and was not contracting (10 minutes had passed). A prostaglandin E2 suppository was put in the field and rubbed on the surface of the uterus, at which time the uterus contracted very well. The uterus was replaced in the abdominal cavity and the incision was closed.

As the dressing was being applied to the abdomen, the patient became hypotensive, as noted by the anesthetist. The physician felt a thready femoral pulse. Two minutes later, the pulse was

absent and the blood pressure was 60/20. The heart had a normal sinus rhythm of 150.

Fluids were instituted, and she was given vasoconstricting drugs to bring back the pressure, with no success. At the same time, chest compressions were initiated and Trendelenburg's position was achieved. She was being ventilated through an existing endotracheal tube. Her color was pink. She had a thready pulse intermittently, although not enough to get a blood pressure. An additional IV was started, and fluids were given at a fast rate. It was thought that electromechanical dissociation had occurred as a result of cardiac tamponade or a severe pulmonary embolus. The heart could be heard pumping at approximately 150 beats/minute. No pulse could be felt. Various resuscitative drugs and measures were undertaken, including Vasoxyl, Dopamine, Narcan and Solu-cortef. Ventricular tachycardia was noted on the monitor and 100 mg of Lidocaine was given IV. She had a "pounding pulse," became responsive and her extremities and the rest of her body were pink. The chest compressions were stopped, but a blood pressure was not obtained. Ventricular fibrillation occurred. She was defibrillated repeatedly, and a Lidocaine drip was started. Blood gases earlier showed a pH 7.223, CO₂ 30.7, PO₂ 315, Bicarb 14.9. At 90 minutes after delivery of the infant blood gases were unchanged. The Hgb was 14.5 gms. Resuscitative measures were continued until 2 hours and 37 minutes after delivery, at which time it was stated that "patient expired."

A 3293-gram male infant with Apgars of 8 and 9 had been delivered. The baby lived and did well.

Autopsy report: The autopsy was essentially negative, showing no evidence of any embolism and only slight cardiomegaly. The autopsy was done after the body was embalmed.

Final diagnosis: The cause of death was signed out as ventricular fibrillation due to electromechanical dissociation.

Reviewer's comments: The estimated blood loss on the operative report was 600 cc's, but when the reviewer talked with the physician about the amount of blood being lost during the long time the uterus was boggy, the physician stated that he did not feel the loss would exceed 2,000 cc's.

Committee opinion: Maternal death, pregnancy related, avoidable. Physician responsibility. The Committee's reasoning was that the cause of death in this patient was hypovolemic shock due to blood loss and the possible hypotensive effect of the different uterotonic agents Pitocin and prostaglandins. There was no documentation to suggest

that she was transfused with blood.

Case 13

A 41-year-old gravida XI, para X was delivered by a midwife at term in the patient's home. She was first seen for prenatal care in the fifth month of her pregnancy. She was seen for 6 prenatal visits. Her previous health status was good. She had one pregnancy termination, as far as the birth certificate information was concerned. Her other previous term pregnancies were apparently normal. This pregnancy was reported to have been entirely normal. The prenatal care was given by a certified nurse-midwife.

The membranes ruptured spontaneously, and six hours and 30 minutes later labor started. She subsequently delivered after two hours of labor without problems at her home, under the supervision of the nurse-midwife. The live-born female infant weighed 7 pounds and 14 ounces with Apgars of 8-8-9. The mother was seen by the nurse-midwife on the 4th and 15th postpartum days, and the uterus was involuting normally with scant lochia. She was feeling well and taking care of her family.

On the 18th postpartum day, she was sitting in a chair feeding the baby when she suddenly felt weak and handed the baby to one of the siblings. She took a couple of gasps and stopped breathing. There was no hemorrhage from the uterus or bleeding from mouth or nose. She was taken to a county hospital, where she was pronounced dead on arrival.

Autopsy report: Pathologic findings: 1) One week postpartum, endometrial cavity hemorrhage; 2) DIC syndrome; 3) Congestion of viscera. External examination: normal, protuberant abdomen. Internal examination: no abnormalities listed, except for the report of moderate congestion seen in the lungs.

Reviewer comments: The case reviewer states that the autopsy findings did not report information that would verify a diagnosis of endometrial cavity hemorrhage with DIC syndrome. Additional information was requested from the pathologist but had not been received at the time this summary was prepared. The reviewer was concerned about the diagnosis because it does not fit with the clinical course of the patient.

Committee opinion: The Committee felt that the cause of death was indeterminate from the information available (autopsy). The Committee suspects that it was direct and unavoidable. The reviewer was instructed to be persistent in trying to obtain the additional information.

Treatment of Male Impotence: A New Option

BRADLEY E. DAVIS, M.D., JOHN W. WEIGEL, M.D., AND
CAROLYN S. WHITFORD, P.A.C.,* *Kansas City*

During the past decade, an increasing number of patients with the complaint of impotence have sought advice from their family physicians, internists and urologists. Several factors have contributed to this development: a public that is more educated and less inhibited regarding sexual problems, more informed physicians, and a marked increase in both clinical and laboratory research regarding the condition of male erectile dysfunction.

In light of the increasing number of patients presenting with impotence, it is important for the primary physician to be aware of new treatment options which can now be offered to patients. In this article, the authors describe their results with pharmacologic injection therapy, a relatively new treatment option used for the treatment of impotence at the University of Kansas Medical Center.

Etiology

The basic components of the erectile mechanism include the vascular system (arterial and venous), the smooth muscles and sinusoids, the nervous supply (somatic and autonomic), the psyche and hormones. Failure of any one or a combination of these components can lead to erectile dysfunction.

Penile erectile tissue is contained within three corporal bodies: two dorsally positioned corpora cavernosa, and the ventrally located corpus spongiosum, containing the urethra. Microscopically, these corporal bodies contain numerous cavernous spaces separated by trabeculae composed of smooth muscle, fibroblasts, collagen and elastic fibers. The penile arterial blood supply is derived from the internal pudendal artery. The venous drainage of the sinusoids takes place primarily

through the cavernous veins situated at the proximal end of each corpus cavernosum. Significant drainage also occurs through the emissary veins, which pierce the tunica albuginea, a thick layer of fibrous tissue surrounding each corpus. The parasympathetic nervous system (S2–S4) is believed to be of primary neurologic importance, as the hemodynamic changes leading to penile erection are under neurologic influence. In addition, a relationship exists between circulating androgens and erectile activity.

Many common disorders have been associated with erectile dysfunction. Psychogenic factors such as depression, alcohol usage, drug abuse or other psychiatric illnesses have been implicated. Vasculogenic disorders associated with impotence include large- or small-vessel occlusive disease, arterial emboli or previous pelvic surgery (e.g., ligation of hypogastric arteries). Neurogenic causes may be classified as trauma (e.g., sacral cord injury), neuropathy (e.g., diabetes mellitus), retroperitoneal surgery (e.g., autonomic disruption), and pharmacologic (e.g., antihypertensive medications). Anatomical lesions such as congenital anomalies or Peyronie's disease may be significant, as may hormonal disorders such as hypothalamic-pituitary or primary gonadal dysfunction.

Treatment

Many pharmacologic agents have been found to induce penile erection following injection into the corpora cavernosa. Smooth-muscle relaxants such as papaverine or nitroglycerin have been proven effective.¹ Alpha-blockers such as phentolamine or phenoxybenzamine have been used to treat impotence by intracavernous injection.² Other agents which have shown similar erection-inducing properties include prostaglandin E1, vasoactive intestinal polypeptide, verapamil, trazodone and chlorpromazine.³

We utilized the combination of papaverine (smooth-muscle relaxant) and phentolamine (al-

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TABLE 1
ETIOLOGY OF ERECTILE DYSFUNCTION

Vascular	64/91	70%
Neurologic	5/91	5.5%
Traumatic	0/91	0%
Psychogenic	18/91	20%
Venous Insufficiency	4/91	4.5%

pha-blocker) for intracavernous injection therapy in 91 patients who presented to the urology service at the University of Kansas with the complaint of impotence. The etiology of impotence was predominantly vascular in origin, as shown in Table 1. Associated risk factors included tobacco use, hypertension, hypercholesterolemia, diabetes mellitus and ethanol use (Table 2). The dosage of papaverine ranged from 3–60 mg per dose,

TABLE 2
ASSOCIATED RISK FACTORS

Tobacco Use	58%
Increased Cholesterol	27%
Hypertension	33%
Diabetes Mellitus	19%
Ethanol Use	22%

and the dosage of phentolamine ranged from .05–4 mg per injection.

Procedurally, a small tuberculin syringe with a 27- or 30-gauge needle is used for injection. Using sterile technique, the mixture is injected near the base of the penis directly into either corpus cavernosum, and firm pressure is applied at the injection site to avoid hematoma formation. Care must be taken to avoid the corpus spongiosum and thereby the urethra. Prior to allowing the patient to perform autoinjection at home, we insist on several teaching sessions in our office to assure proper technique and to titrate the medication adequately.

Complications of pharmacologic therapy may include orthostatic hypotension, swelling, infection, ecchymosis, fibrosis and priapism (Table 3).

TABLE 3
COMPLICATIONS

Dizziness	0/91	0%
Swelling	5/91	6%
Infection	0/91	0%
Ecchymosis	11/91	12%
Fibrosis	3/91	3%
Priapism	4/91	4%

The least desired complication, priapism, has been reported to occur in up to 10% of patients receiving pharmacologic injection therapy.⁴ If priapism occurs, prompt, appropriate treatment must be given by a urologist to avoid serious sequelae. We attribute our low complication rate to the amount of time spent with the patients in our teaching sessions.

We have been extremely encouraged with our results using intracavernous injection of vasodilators for the treatment of impotence. Sixty-four of 91 patients (70%) reported adequate response to treatment. The remaining 27 patients (30%) reported inadequate response and went on to other modes of treatment, such as a penile prosthesis.

The discovery of the ability to induce penile erection by the intracavernous injection of pharmacologic agents has revolutionized the evaluation and treatment of impotence. This form of therapy is particularly useful for many diabetics, many males with partial vascular incompetence, and as an adjunct to other surgical vascular procedures which have improved, but not totally cured, the impotent patient. It is extremely effective for the patient with medication-related impotence and for the patient with neurogenic impotence. Injection therapy also has a role in the early treatment of some males with psychogenic impotence. We have been pleased with our results using papaverine and phentolamine to date, and we are now employing a newer agent, prostaglandin E1, in hopes of reducing side effects even further.

REFERENCES

1. Virag R. Intracavernous injections of papaverine for erectile failure. Letter to the editor, *Lancet* 1982;2:938.
2. Brindley GS. Cavernosal alpha-blockade: A new technique for investigating and treating erectile impotence. *Br J Psychiatry* 1983;143:332.
3. Lue TF, Tanagho EA. Physiology of erection and pharmacologic management of impotence. *J Urol* 1987;137:829–36.
4. Broderick GA, Lue TF. Priapism and the Physiology of Erection. *AUA Update Series* 1988; Lesson 29, Volume VII, pp. 226–31.

The Esophageal ECG for Diagnosing Arrhythmias

DONALD L. VINE, M.D.,* *Wichita*

Sometimes it is not possible, using the surface electrocardiogram alone, to know for sure whether a wide-QRS tachycardia is of ventricular or supraventricular origin. If the patient is hemodynamically stable, additional information can often be obtained using an esophageal electrode.

When a catheter with a pair of recording electrodes which are 10 to 15 millimeters apart is placed within the heart, the largest deflections are recorded from the chamber closest to the catheter tip. A similar situation exists when such an electrode is placed in the esophagus close to the left atrium.¹ When properly positioned, the atrial electrogram becomes quite prominent and the QRS complex becomes less so (Figure 1).

Wide-QRS Tachycardia

Clear identification of atrial activity should allow the unequivocal differentiation between some wide-QRS tachycardias, such as ventricular tachycardia with atrioventricular dissociation, and others, such as atrial flutter with aberrant ventricular conduction.

While esophageal electrocardiography can be performed by passing a disposable pacing electrode via the nose or mouth, there are capsule electrodes available which can be swallowed by the patient and used to record atrial electrical activity.

Using such an electrode, Schnittger et al.² studied 14 emergency room patients whose wide-QRS tachycardias could not be diagnosed with certainty by electrocardiography. In each case, a pill electrode was swallowed with water and allowed to descend 45 cm into the esophagus. The electrogram was recorded using relatively inexpensive, commercially available equipment as the electrode was withdrawn in 1-cm increments.

Eight of these patients had wide-QRS tachycardias, and the diagnosis was ventricular tachy-

cardia versus supraventricular tachycardia with aberrancy. Following esophageal electrocardiography, a definite diagnosis was made in four patients and a probable diagnosis in three. In one of these patients the diagnosis remained unclarified.

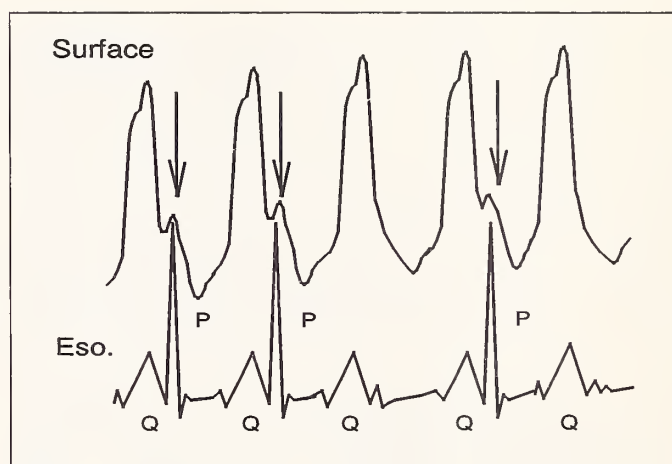


Figure 1. Ventricular tachycardia. Retrograde P waves are ambiguous deformities after the downstroke of the QRS. Diagnosis is made when 1 to 1 VA conduction changes to 2 to 1 (beat 3).

Other Tachycardias

Using similar techniques, Shaw and associates³ studied 50 patients with tachycardias of uncertain etiology discovered in the emergency room or in critical care units. The esophageal electrode could be successfully swallowed by 48. Most of these patients had supraventricular tachyarrhythmias, and the surface electrocardiographic diagnosis was incorrect among half of the patients with "sinus tachycardia," 45% with "atrial flutter," 80% of the patients with "atrial fibrillation" and in the single patient with ventricular tachycardia. Therapy was altered by the findings of esophageal electrocardiography in 40% of the cases.

Comments

It may seem like unnecessary time and expense to resort to esophageal electrocardiography when a

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Address correspondence to Dr. Vine, Department of Medicine, UKSM-W, 1010 N. Kansas, Wichita, KS 67214.

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CARDIOLOGY NOTES

(Continued from page 327.)

simple injection of lidocaine will probably terminate 80% of the wide-QRS tachycardias seen in the emergency room. On the other hand, the documentation that the arrhythmia is of supraventricular origin may save the patient subsequent electrophysiologic testing as part of the work-up of a misdiagnosed episode of sustained "ventricular tachycardia."

With respect to supraventricular arrhythmias, the study by Shaw and associates suggests that as many as 50% of common supraventricular arrhythmias may be misdiagnosed in the critical care setting, and that more appropriate care might be rendered if an accurate diagnosis were made.

REFERENCES

1. Binkley PF, et al. In vivo validation of the origin of the esophageal electrogram. *J Am Coll Cardiol* 1986;7:813.
2. Schnittger I, et al. Esophageal electrocardiography: A new technology revives an old technique. *Am J Cardiol* 1986;57:604.
3. Shaw M, et al. Esophageal electrocardiography in acute cardiac care. *Am J Med* 1987;82:689.

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CONSULTING EDITORS

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Warnings: *Angioedema:* Angioedema of the face, extremities, lips, tongue, glottis, and/or larynx has been reported in patients treated with ACE inhibitors, including VASOTEC. In such cases, VASOTEC should be promptly discontinued and the patient carefully observed until the swelling disappears. In instances where swelling has been confined to the face and lips, the condition has generally resolved without treatment, although antihistamines have been useful in relieving symptoms. Angioedema associated with laryngeal edema may be fatal. **Where there is involvement of the tongue, glottis, or larynx likely to cause airway obstruction, appropriate therapy, e.g., subcutaneous epinephrine solution 1:1000 (0.3 mL to 0.5 mL), should be promptly administered.** (See ADVERSE REACTIONS.)

Hypotension: Excessive hypotension is rare in uncomplicated hypertensive patients treated with VASOTEC alone. Patients with heart failure given VASOTEC commonly have some reduction in blood pressure, especially with the first dose, but discontinuation of therapy for continuing symptomatic hypotension usually is not necessary when dosing instructions are followed; caution should be observed when initiating therapy. (See DOSAGE AND ADMINISTRATION.) Patients at risk for excessive hypotension, sometimes associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death, include those with the following conditions or characteristics: heart failure, hyponatremia, high-dose diuretic therapy, recent intensive diuresis or increase in diuretic dose, renal dialysis, or severe volume and/or salt depletion of any etiology. It may be advisable to eliminate the diuretic (except in patients with heart failure), reduce the diuretic dose, or increase salt intake cautiously before initiating therapy with VASOTEC in patients at risk for excessive hypotension who are able to tolerate such adjustments. (See PRECAUTIONS, Drug Interactions and ADVERSE REACTIONS.) In patients at risk for excessive hypotension, therapy should be started under very close medical supervision and such patients should be followed closely for the first two weeks of treatment and whenever the dose of enalapril and/or diuretic is increased. Similar considerations may apply to patients with ischemic heart disease or cardiovascular disease in whom an excessive fall in blood pressure could result in a myocardial infarction or cerebrovascular accident. If excessive hypotension occurs, the patient should be placed in the supine position and, if necessary, receive an intravenous infusion of normal saline. A transient hypotensive response is not a contraindication to further doses of VASOTEC, which usually can be given without difficulty once the blood pressure has stabilized. If symptomatic hypotension develops, a dose reduction or discontinuation of VASOTEC or concomitant diuretic may be necessary.

Neutropenia/Agranulocytosis: Another ACE inhibitor, captopril, has been shown to cause agranulocytosis and bone marrow depression, rarely in uncomplicated patients but more frequently in patients with renal impairment, especially if they also have a collagen vascular disease. Available data from clinical trials of enalapril are insufficient to show that enalapril does not cause agranulocytosis at similar rates. Foreign marketing experience has revealed several cases of neutropenia or agranulocytosis in which a causal relationship to enalapril cannot be excluded. Periodic monitoring of white blood cell counts in patients with collagen vascular disease and renal disease should be considered.

Precautions: *General:* *Impaired Renal Function:* As a consequence of inhibiting the renin-angiotensin-aldosterone system, changes in renal function may be anticipated in susceptible individuals. In patients with severe heart failure whose renal function may depend on the activity of the renin-angiotensin-aldosterone system, treatment with ACE inhibitors, including VASOTEC, may be associated with oliguria and/or progressive azotemia and rarely with acute renal failure and/or death.

In clinical studies in hypertensive patients with unilateral or bilateral renal artery stenosis, increases in blood urea nitrogen and serum creatinine were observed in 20% of patients. These increases were almost always reversible upon discontinuation of enalapril and/or diuretic therapy. In such patients, renal function should be monitored during the first few weeks of therapy.

Some patients with hypertension or heart failure with no apparent preexisting renal vascular disease have developed increases in blood urea and serum creatinine, usually minor and transient, especially when VASOTEC has been given concomitantly with a diuretic. This is more likely to occur in patients with preexisting renal impairment. Dosage reduction and/or discontinuation of the diuretic and/or VASOTEC may be required.

Evaluation of patients with hypertension or heart failure should always include assessment of renal function. (See DOSAGE AND ADMINISTRATION.)

Hyperkalemia: Elevated serum potassium (>5.7 mEq/L) was observed in approximately 1% of hypertensive patients in clinical trials. In most cases these were isolated values which resolved despite continued therapy. Hyperkalemia was a cause of discontinuation of therapy in 0.28% of hypertensive patients. In clinical trials in heart failure, hyperkalemia was observed in 3.8% of patients, but was not a cause for discontinuation.

Risk factors for the development of hyperkalemia include renal insufficiency, diabetes mellitus, and the concomitant use of potassium-sparing diuretics, potassium supplements, and/or potassium-containing salt substitutes, which should be used cautiously, if at all, with VASOTEC. (See Drug Interactions.)

Surgery/Anesthesia: In patients undergoing major surgery or during anesthesia with agents that produce hypotension, enalapril may block angiotensin II formation secondary to compensatory renin release. If hypotension occurs and is considered to be due to this mechanism, it can be corrected by volume expansion.

Information for Patients:

Angioedema: Angioedema, including laryngeal edema, may occur especially following the first dose of enalapril. Patients should be so advised and told to report immediately any signs or symptoms suggesting angioedema (swelling of face, extremities, eyes, lips, tongue, difficulty in swallowing or breathing) and to take no more drug until they have consulted with the prescribing physician.

Hypotension: Patients should be cautioned to report lightheadedness, especially during the first few days of therapy. If actual syncope occurs, the patients should be told to discontinue the drug until they have consulted with the prescribing physician.

All patients should be cautioned that excessive perspiration and dehydration may lead to an excessive fall in blood pressure because of reduction in fluid volume. Other causes of volume depletion such as vomiting or diarrhea may also lead to a fall in blood pressure; patients should be advised to consult with the physician.

Hyperkalemia: Patients should be told not to use salt substitutes containing potassium without consulting their physician.

Neutropenia: Patients should be told to report promptly any indication of infection (e.g., sore throat, fever) which may be a sign of neutropenia.

NOTE: As with many other drugs, certain advice to patients being treated with enalapril is warranted. This information is intended to aid in the safe and effective use of this medication. It is not a disclosure of all possible adverse or intended effects.

Drug Interactions:

Hypotension: Patients on Diuretic Therapy: Patients on diuretics and especially those in whom diuretic therapy was recently instituted may occasionally experience an excessive reduction of blood pressure after initiation of therapy with enalapril. The possibility of hypotensive effects with enalapril can be minimized by either discontinuing the diuretic or increasing the salt intake prior to initiation of treatment with enalapril. If it is necessary to continue the diuretic, provide close medical supervision after the initial dose for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and DOSAGE AND ADMINISTRATION.)

Agents Causing Renin Release: The antihypertensive effect of VASOTEC is augmented by antihypertensive agents that cause renin release (e.g., diuretics).

Other Cardiovascular Agents: VASOTEC has been used concomitantly with beta-adrenergic-blocking agents, methyldopa, nitrates, calcium-blocking agents, hydralazine, prazosin, and digoxin without evidence of clinically significant adverse interactions.

Agents Increasing Serum Potassium: VASOTEC attenuates potassium loss caused by thiazide-type diuretics. Potassium-sparing diuretics (e.g., spironolactone, triamterene, or amiloride), potassium supplements, or potassium-containing salt substitutes may lead to significant increases in serum potassium. Therefore, if concomitant use of these agents is indicated because of demonstrated hypokalemia, they should be used with caution and with frequent monitoring of serum potassium. Potassium-sparing agents should generally not be used in patients with heart failure receiving VASOTEC.

Lithium: Lithium toxicity has been reported in patients receiving lithium concomitantly with drugs which cause elimination of sodium, including ACE inhibitors. A few cases of lithium toxicity have been reported in patients receiving concomitant VASOTEC and lithium and were reversible upon discontinuation of both drugs. It is recommended that serum lithium levels be monitored frequently if enalapril is administered concomitantly with lithium.

Pregnancy—Category C: There was no fetotoxicity or teratogenicity in rats treated with up to 200 mg/kg/day of enalapril (333 times the maximum human dose). Fetotoxicity, expressed as a decrease in average fetal weight, occurred in rats given 1200 mg/kg/day of enalapril but did not occur when these animals were supplemented with saline. Enalapril was not teratogenic in rabbits. However, maternal and fetal toxicity occurred in some rabbits at doses of 1 mg/kg/day or more. Saline supplementation prevented the maternal and fetal toxicity seen at doses of 3 and 10 mg/kg/day, but not at 30 mg/kg/day (50 times the maximum human dose).

Radioactivity was found to cross the placenta following administration of labeled enalapril to pregnant hamsters. There are no adequate and well-controlled studies of enalapril in pregnant women. However, data are available that show enalapril crosses the human placenta. Because the risk of fetal toxicity with the use of ACE inhibitors has not

been clearly defined, VASOTEC® (Enalapril Maleate, MSD) should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Postmarketing experience with all ACE inhibitors thus far suggests the following with regard to pregnancy outcome. Inadvertent exposure limited to the first trimester of pregnancy has not been reported to affect fetal outcome adversely. Fetal exposure during the second and third trimesters of pregnancy has been associated with fetal and neonatal morbidity and mortality.

When ACE inhibitors are used during the later stages of pregnancy, there have been reports of hypotension and decreased renal perfusion in the newborn. Oligohydramnios in the mother has also been reported, presumably representing decreased renal function in the fetus. Infants exposed *in utero* to ACE inhibitors should be closely observed for hypotension, oliguria, and hyperkalemia. If oliguria occurs, attention should be directed toward support of blood pressure and renal perfusion with the administration of fluids and pressors as appropriate. Problems associated with prematurity such as patent ductus arteriosus have occurred in association with maternal use of ACE inhibitors, but it is not clear whether they are related to ACE inhibition, maternal hypertension, or the underlying prematurity.

Nursing Mothers: Milk in lactating rats contains radioactivity following administration of 14 C enalapril maleate. It is not known whether this drug is secreted in human milk. Because many drugs are secreted in human milk, caution should be exercised when VASOTEC is given to a nursing mother.

Pediatric Use: Safety and effectiveness in children have not been established.

Adverse Reactions: VASOTEC has been evaluated for safety in more than 10,000 patients, including over 1000 patients treated for one year or more. VASOTEC has been found to be generally well tolerated in controlled clinical trials involving 2987 patients.

HYPERTENSION: The most frequent clinical adverse experiences in controlled trials were headache (5.2%), dizziness (4.3%), and fatigue (3%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in controlled clinical trials were: diarrhea (1.4%), nausea (1.4%), rash (1.4%), cough (1.3%), orthostatic effects (1.2%), and asthenia (1.1%).

HEART FAILURE: The most frequent clinical adverse experiences in both controlled and uncontrolled trials were: dizziness (7.9%), hypotension (6.7%), orthostatic effects (2.2%), syncope (2.2%), cough (2.2%), chest pain (2.1%), and diarrhea (2.1%).

Other adverse experiences occurring in greater than 1% of patients treated with VASOTEC in both controlled and uncontrolled clinical trials were: fatigue (1.8%), headache (1.8%), abdominal pain (1.6%), asthenia (1.6%), orthostatic hypotension (1.6%), vertigo (1.6%), angina pectoris (1.5%), nausea (1.3%), vomiting (1.3%), bronchitis (1.3%), dyspnea (1.3%), urinary tract infection (1.3%), rash (1.3%), and myocardial infarction (1.2%).

Other serious clinical adverse experiences occurring since the drug was marketed or adverse experiences occurring in 0.5% to 1% of patients with hypertension or heart failure in clinical trials in order of decreasing severity within each category:

Cardiovascular: Cardiac arrest; myocardial infarction or cerebrovascular accident, possibly secondary to excessive hypotension in high-risk patients (see WARNINGS, Hypotension); pulmonary embolism and infarction; pulmonary edema; rhythm disturbances; atrial fibrillation; palpitation.

Digestive: Ileus, pancreatitis, hepatitis (hepatocellular or cholestatic jaundice), melena, anorexia, dyspepsia, constipation, glossitis, stomatitis, dry mouth.

Musculoskeletal: Muscle cramps.

Nervous/Psychiatric: Depression, confusion, ataxia, somnolence, insomnia, nervousness, paresthesia.

Urogenital: Renal failure, oliguria, renal dysfunction (see PRECAUTIONS and DOSAGE AND ADMINISTRATION).

Respiratory: Bronchospasm, rhinorrhea, sore throat and hoarseness, asthma, upper respiratory infection.

Skin: Exfoliative dermatitis, toxic epidermal necrolysis, Stevens-Johnson syndrome, herpes zoster, erythema multiforme, urticaria, pruritus, alopecia, flushing, hyperhidrosis.

Special Senses: Blurred vision, taste alteration, anosmia, tinnitus, conjunctivitis, dry eyes, tearing.

A symptom complex has been reported which may include a positive ANA, an elevated erythrocyte sedimentation rate, arthralgias/arthritis, myalgias, fever, serositis, vasculitis, leukocytosis, eosinophilia, photosensitivity, rash, and other dermatologic manifestations.

Angioedema: Angioedema has been reported in patients receiving VASOTEC (0.2%). Angioedema associated with laryngeal edema may be fatal. If angioedema of the face, extremities, lips, tongue, glottis, and/or larynx occurs, treatment with VASOTEC should be discontinued and appropriate therapy instituted immediately. (See WARNINGS.)

Hypotension: In the hypertensive patients, hypotension occurred in 0.9% and syncope occurred in 0.5% of patients following the initial dose or during extended therapy. Hypotension or syncope was a cause for discontinuation of therapy in 0.1% of hypertensive patients. In heart failure patients, hypotension occurred in 6.7% and syncope occurred in 2.2% of patients. Hypotension or syncope was a cause for discontinuation of therapy in 1.9% of patients with heart failure. (See WARNINGS.)

Clinical Laboratory Test Findings

Serum Electrolytes: Hyperkalemia (see PRECAUTIONS), hyponatremia.

Creatinine, Blood Urea Nitrogen: In controlled clinical trials, minor increases in blood urea nitrogen and serum creatinine, reversible upon discontinuation of therapy, were observed in about 0.2% of patients with essential hypertension treated with VASOTEC alone. Increases are more likely to occur in patients receiving concomitant diuretics or in patients with renal artery stenosis. (See PRECAUTIONS.) In patients with heart failure who were also receiving diuretics with or without digitalis, increases in blood urea nitrogen or serum creatinine, usually reversible upon discontinuation of VASOTEC and/or other concomitant diuretic therapy, were observed in about 11% of patients. Increases in blood urea nitrogen or creatinine were a cause for discontinuation in 1.2% of patients.

Hemoglobin and Hematocrit: Small decreases in hemoglobin and hematocrit (mean decreases of approximately 0.3 g% and 1.0 vol %, respectively) occur frequently in either hypertension or heart failure patients treated with VASOTEC but are rarely of clinical importance unless another cause of anemia coexists. In clinical trials, less than 0.1% of patients discontinued therapy due to anemia.

Other (Causal Relationship Unknown): In marketing experience, rare cases of neutropenia, thrombocytopenia, and bone marrow depression have been reported. A few cases of hemolysis have been reported in patients with G6PD deficiency.

Liver Function Tests: Elevations of liver enzymes and/or serum bilirubin have occurred.

Dosage and Administration: *Hypertension:* In patients who are currently being treated with a diuretic, symptomatic hypotension occasionally may occur following the initial dose of VASOTEC. The diuretic should, if possible, be discontinued for two to three days before beginning therapy with VASOTEC to reduce the likelihood of hypotension. (See WARNINGS.) If the patient's blood pressure is not controlled with VASOTEC alone, diuretic therapy may be resumed. If the diuretic cannot be discontinued, an initial dose of 2.5 mg should be used under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.)

The recommended initial dose in patients not on diuretics is 5 mg once a day. Dosage should be adjusted according to blood pressure response. The usual dosage range is 10 to 40 mg per day administered in a single dose or in two divided doses. In some patients treated once daily, the antihypertensive effect may diminish toward the end of the dosing interval. In such patients, an increase in dosage or twice-daily administration should be considered. If blood pressure is not controlled with VASOTEC alone, a diuretic may be added.

Concomitant administration of VASOTEC with potassium supplements, potassium salt substitutes, or potassium-sparing diuretics may lead to increases of serum potassium (see PRECAUTIONS).

Dosage Adjustment in Hypertensive Patients with Renal Impairment: The usual dose of enalapril is recommended for patients with a creatinine clearance >30 mL/min (serum creatinine of up to approximately 3 mg/dL). For patients with creatinine clearance ≤ 30 mL/min (serum creatinine ≥ 3 mg/dL), the first dose is 2.5 mg once daily. The dosage may be titrated upward until blood pressure is controlled or to a maximum of 40 mg daily.

Heart Failure: VASOTEC is indicated as adjunctive therapy with diuretics and digitalis. The recommended starting dose is 2.5 mg once or twice daily. After the initial dose of VASOTEC, the patient should be observed under medical supervision for at least two hours and until blood pressure has stabilized for at least an additional hour. (See WARNINGS and PRECAUTIONS, Drug Interactions.) If possible, the dose of the diuretic should be reduced, which may diminish the likelihood of hypotension. The appearance of hypotension after the initial dose of VASOTEC does not preclude subsequent careful dose titration with the drug, following effective management of the hypotension. The usual therapeutic dosing range for the treatment of heart failure is 5 to 20 mg daily given in two divided doses. The maximum daily dose is 40 mg. Once-daily dosing has been effective in a controlled study, but nearly all patients in this study were given 40 mg, the maximum recommended daily dose, and there has been much more experience with twice-daily dosing. In addition, in a placebo-controlled study which demonstrated reduced mortality in patients with severe heart failure (NYHA Class IV), patients were treated with 2.5 to 40 mg per day of VASOTEC, almost always administered in two divided doses. (See CLINICAL PHARMACOLOGY, Pharmacodynamics and Clinical Effects.) Dosage may be adjusted depending upon clinical or hemodynamic response. (See WARNINGS.)

Dosage Adjustment in Patients with Heart Failure and Renal Impairment or Hyponatremia: In patients with heart failure who have hyponatremia (serum sodium <130 mEq/L) or with serum creatinine >1.6 mg/dL, therapy should be initiated at 2.5 mg daily under close medical supervision. (See DOSAGE AND ADMINISTRATION, Heart Failure, WARNINGS, and PRECAUTIONS, Drug Interactions.) The dose may be increased to 2.5 mg b.i.d., then 5 mg b.i.d. and higher as needed, usually at intervals of four days or more, if at the time of dosage adjustment there is not excessive hypotension or significant deterioration of renal function. The maximum daily dose is 40 mg.

For more detailed information, consult your MSD Representative or see Prescribing Information, Merck Sharp & Dohme, Division of Merck & Co., Inc., West Point, PA 19386. J9VS61R2(820)

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VASOTEC is contraindicated in patients who are hypersensitive to this product and in patients with a history of angioedema related to previous treatment with an ACE inhibitor. A diminished antihypertensive effect toward the end of the dosing interval can occur in some patients.

For a Brief Summary of Prescribing Information, please see the last page of this advertisement.

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